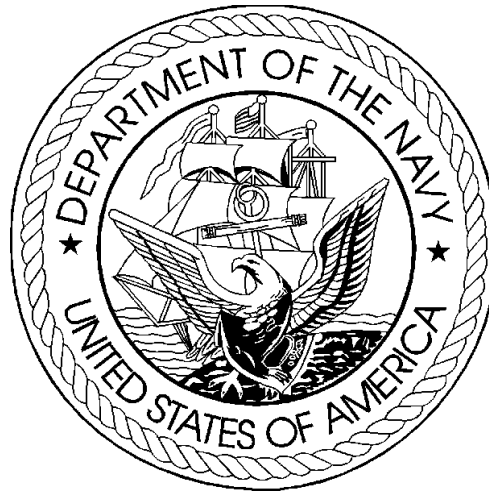


DEPARTMENT OF THE NAVY FY 1998/1999 BUDGET ESTIMATES



JUSTIFICATION OF ESTIMATES

OTHER PROCUREMENT, NAVY BUDGET ACTIVITY 4

FEBRUARY 1997

UNCLASSIFIED

EXHIBIT P-1

DEPARTMENT OF THE NAVY
FY 1998/FY 1999 PROCUREMENT PROGRAMS

APPROPRIATION: 1810N Other Procurement, Navy

DATE: 02/04/97

LINE NO	ITEM NOMENCLATURE	IDENT CODE	DOLLARS				MILLIONS OF DOLLARS			
			FY 1998 UNIT COST	----- FY 1996 ----- QUANTITY	----- FY 1997 ----- COST	----- FY 1998 ----- QUANTITY	----- FY 1999 ----- COST	----- FY 1999 ----- QUANTITY		
BUDGET ACTIVITY 04: Ordnance Support Equipment										
Ship Gun System Equipment										
	145 5110 Gun Fire Control Equipment	A			4.0		10.2		9.8	22.5 U
Ship Missile Systems Equipment										
	146 5208 MK-92 Fire Control System	A			0.7		1.8		0.9	1.0 U
	147 5227 HARPOON Support Equipment	A			2.8		0.1		0.2	- U
	148 5233 TARTAR Support Equipment	A			17.1		-		-	- U
	149 5234 Point Defense Support Equipme	A			6.5		-		-	- U
	150 5235 Airborne ECM/ECCM	A			0.5		0.3		-	- U
	151 5236 Engagement Systems Support	A			-		14.7		6.9	1.7 U
	152 5237 NATO Seasparrow	A			-		4.6		6.9	27.3 U
	153 5238 RAM GMLS	A			44.5		44.5		68.3	61.2 U
	154 5239 Ship Self Defense System	B			15.3		19.2		5.8	22.7 U
	155 5246 AEGIS Support Equipment	A			61.9		32.7		26.8	46.5 U
	156 5250 Surface TOMAHAWK Support Equi	A			63.7		83.8		65.5	94.8 U
	157 5255 Submarine TOMAHAWK Support Eq	A			1.3		-		1.4	4.1 U
	158 5260 Vertical Launch Systems	A			4.9		12.7		7.6	7.1 U
FBM Support Equipment										
	159 5355 Strategic Platform Support Eq	A			-		2.1		2.3	4.1 U
	160 5358 Strategic Missile Systems Equ	A			103.9		127.4		231.5	292.7 U
ASW Support Equipment										
	161 5420 SSN Combat Control Systems	A			12.5		14.4		20.5	25.6 U
	162 5431 Submarine ASW Support Equipme	A			6.3		9.8		3.4	3.8 U
	163 5449 Surface ASW Support Equipment	A			6.9		5.3		5.9	6.1 U
	164 5455 ASW Range Support Equipment	A			5.1		2.4		3.6	4.5 U
Other Ordnance Support Equipment										
	165 5509 Explosive Ordnance Disposal E	B			9.5		6.1		7.5	8.7 U
	166 5518 Unmanned Seaborne Target	A			4.2		-		4.3	- U
	167 5530 Anti-ship Missile Decoy Syste	A			2.5		23.6		24.7	22.4 U
	168 5542 Industrial Facilities (Calibr	A			5.3		4.0		1.4	1.1 U
	169 5545 Stock Surveillance Equipment	A			1.4		1.4		1.3	1.5 U

UNCLASSIFIED

EXHIBIT P-1

DEPARTMENT OF THE NAVY
FY 1998/FY 1999 PROCUREMENT PROGRAMS

APPROPRIATION: 1810N Other Procurement, Navy

DATE: 02/04/97

LINE NO	ITEM NOMENCLATURE	IDENT CODE	DOLLARS				MILLIONS OF DOLLARS			
			FY 1998	----- FY 1996 -----	----- FY 1997 -----	----- FY 1998 -----	----- FY 1999 -----			
			UNIT COST	QUANTITY	COST	QUANTITY	COST	QUANTITY	COST	
Other Expendable Ordnance										
170	5621 Pyrotechnic and Demolition (S	A			9.4	-	-	-	-	U
171	5635 Fleet Mine Support Equipment	A			6.0	5.3	5.3	5.4	5.4	U
172	5660 Surface Training Device Mods	A			-	2.4	4.8	4.5	4.5	U
173	5661 Submarine Training Device Mod	A			-	19.3	23.0	23.3	23.3	U
174	5665 Industrial Depot Maintenance	A			-	20.2	-	-	-	U
TOTAL	Ordnance Support Equipment				396.3	468.4	539.7	692.5	692.5	

Other Procurement, Navy
Program and Financing (in Thousands of dollars) SUMMARY

		Budget Plan (amounts for PROCUREMENT actions programed)			
Identification code	17-1810-0-1-051	1996 actual	1997 est.	1998 est.	1999 est.
Program by activities:					
Direct program:					
00.0101	Ships support equipment	617,796	815,611	771,120	1,070,756
00.0201	Communications and electronics equipment	781,611	1,044,672	925,763	1,583,978
00.0301	Aviation support equipment	192,128	249,793	169,250	255,932
00.0401	Ordnance support equipment	396,264	468,410	539,662	692,543
00.0501	Civil engineering support equipment	46,716	43,943	53,610	81,860
00.0601	Supply support equipment	93,966	67,709	56,528	127,373
00.0701	Personnel and command support equipment	115,439		60,850	70,615
00.0801	Spares and repair parts	183,379	202,217	248,717	302,318
00.9101	Total direct program	2,427,299	2,892,355	2,825,500	4,185,375
01.0101	Reimbursable program	70,033	42,000	42,000	42,000
10.0001	Total	2,497,332	2,934,355	2,867,500	4,227,375
Financing:					
Offsetting collections from:					
11.0001	Federal funds(-)	-1,918	-42,000	-42,000	-42,000
14.0001	Non-Federal sources(-)	-68,115			
17.0001	Recovery of prior year obligations				
Unobligated balance available, start of year:					
21.4002	For completion of prior year budget plans				
21.4003	Available to finance new budget plans	-27,495	-14,200		
21.4009	Reprogramming from/to prior year budget plans	-14,000			
22.1001	Unobligated balance transferred to other accounts		4,200		
Unobligated balance available, end of year:					
24.4002	For completion of prior year budget plans				
24.4003	Available to finance subsequent year budget plans	14,200			
39.0001	Budget authority	2,400,004	2,882,355	2,825,500	4,185,375
Budget authority:					
40.0001	Appropriation	2,455,442	3,067,944	2,825,500	4,185,375
40.3601	Appropriation rescinded (unob bal)	-8,828	-10,000		
40.7501	Reduction pursuant to P.L. 104-208 (-), 8037(e)		-6,439		
41.0001	Transferred to other accounts (-)	-76,948	-169,150		
42.0001	Transferred from other accounts	30,338			
43.0001	Appropriation (adjusted)	2,400,004	2,882,355	2,825,500	4,185,375

Other Procurement, Navy
Program and Financing (in Thousands of dollars) SUMMARY

		Obligations			
Identification code	17-1810-0-1-051	1996 actual	1997 est.	1998 est.	1999 est.
Program by activities:					
Direct program:					
00.0101	Ships support equipment	596,593	684,724	792,152	953,019
00.0201	Communications and electronics equipment	871,323	1,097,955	899,167	1,533,267
00.0301	Aviation support equipment	176,903	238,046	177,033	240,993
00.0401	Ordnance support equipment	398,426	404,965	474,729	654,593
00.0501	Civil engineering support equipment	65,939	42,457	51,387	73,857
00.0601	Supply support equipment	100,513	77,535	61,691	110,693
00.0701	Personnel and command support equipment	193,184	29,539	60,175	65,619
00.0801	Spares and repair parts	215,400	179,567	216,931	284,702
00.9101	Total direct program	2,618,281	2,754,788	2,733,265	3,916,743
01.0101	Reimbursable program	62,124	50,930	42,000	42,000
10.0001	Total	2,680,405	2,805,718	2,775,265	3,958,743
Financing:					
Offsetting collections from:					
11.0001	Federal funds(-)	-4,591	-42,000	-42,000	-42,000
14.0001	Non-Federal sources(-)	-66,891			
17.0001	Recovery of prior year obligations	-21,397			
Unobligated balance available, start of year:					
21.4002	For completion of prior year budget plans	-673,573	-499,346	-627,983	-720,218
21.4003	Available to finance new budget plans	-27,495	-14,200		
21.4009	Reprogramming from/to prior year budget plans				
22.1001	Unobligated balance transferred to other accounts		4,200		
Unobligated balance available, end of year:					
24.4002	For completion of prior year budget plans	499,346	627,983	720,218	988,850
24.4003	Available to finance subsequent year budget plans	14,200			
39.0001	Budget authority	2,400,004	2,882,355	2,825,500	4,185,375
Budget authority:					
40.0001	Appropriation	2,455,442	3,067,944	2,825,500	4,185,375
40.3601	Appropriation rescinded (unob bal)	-8,828	-10,000		
40.7501	Reduction pursuant to P.L. 104-208 (-), 8037(e)		-6,439		
41.0001	Transferred to other accounts (-)	-76,948	-169,150		
42.0001	Transferred from other accounts	30,338			
43.0001	Appropriation (adjusted)	2,400,004	2,882,355	2,825,500	4,185,375

Other Procurement, Navy
Program and Financing (in Thousands of dollars) SUMMARY

		Obligations			
Identification code	17-1810-0-1-051	1996 actual	1997 est.	1998 est.	1999 est.
Relation of obligations to outlays:					
71.0001	Obligations incurred	2,608,923	2,763,718	2,733,265	3,916,743
72.1001	Orders on hand, SOY	-30,569	-86,326	-86,326	-86,326
72.4001	Obligated balance, start of year	4,671,807	3,793,123	3,694,860	3,679,591
74.1001	Orders on hand, EOY	86,326	86,326	86,326	86,326
74.4001	Obligated balance, end of year	-3,793,123	-3,694,860	-3,679,591	-4,506,636
77.0001	Adjustments in expired accounts (net)	70,950			
78.0001	Adjustments in unexpired accounts	-21,397			
90.0001	Outlays (net)	3,592,917	2,861,981	2,748,534	3,089,698

Other Procurement, Navy
Object Classification (in Thousands of dollars) SUMMARY

-----	-----	-----	-----	-----	
Identification code	17-1810-0-1-051	1996 actual	1997 est.	1998 est.	1999 est.
-----	-----	-----	-----	-----	-----
Direct obligations:					
125.101	Advisory and assistance services	39,841	40,866	36,534	43,623
	Purchases goods/services (inter/intra) Fed accounts				
125.303	Purchases from revolving funds	699,254	677,669	787,453	868,016
126.001	Supplies and materials	655,400	795,655	634,436	959,263
131.001	Equipment	1,223,786	1,240,598	1,274,842	2,045,841
		-----	-----	-----	-----
199.001	Total Direct obligations	2,618,281	2,754,788	2,733,265	3,916,743
Reimbursable obligations:					
225.201	Other services with the private sector	33,363			
231.001	Equipment	28,761	50,930	42,000	42,000
		-----	-----	-----	-----
299.001	Total Reimbursable obligations	62,124	50,930	42,000	42,000
		-----	-----	-----	-----
999.901	Total obligations	2,680,405	2,805,718	2,775,265	3,958,743
		-----	-----	-----	-----

Comparison of FY 1996 Financing as reflected
in FY 1997 Budget with 1996 Financing as
Shown in the FY 1998 Budget

(\$ in Thousands)

	Financing per FY 1997 Budget	Financing Per FY 1998 Budget	Increase (+) or Decrease (-)
Program Requirements (Total)	\$2,457,431	\$2,497,332	+\$39,901
Program Requirements (Service Account)	(\$2,421,431)	(\$2,427,299)	(+\$5,868)
Program Requirements (Reimbursable)	\$36,000	\$70,033	+\$34,033
Appropriation (Adjusted)	\$2,399,131	\$2,400,004	+\$873

Explanation of Changes in Financing

The Fiscal Year 1996 program has changed since the presentation of the FY 1997 budget as noted below:

1. Program Requirements increased by \$39,901K, \$5,868K for direct service and \$34,033 reflecting increased reimbursable requirements.
2. Appropriation (Adjusted). There has been a minor net increase to the appropriation of \$873K reflecting transfers from other accounts for the Drug Interdiction Program.

Comparison of FY 1996 program requirements as reflected
in the FY 1997 Budget with FY 1996 program requirements
as shown in the FY 1998 Budget

Summary of Requirements (\$ In Thousands)

	Total Program Requirements per FY 1997 Budget	Total Program Requirements per FY 1998 Budget	Increase (+) or Decrease (-)
Ship Support Equipment	\$610,985	\$617,796	+\$6,811
Communications & Electronic Equipment	783,792	781,611	-2,181
Aviation Support Equipment	197,039	192,128	-4,911
Ordnance Support Equipment	399,451	396,264	-3,187
Civil Engineering Support Equipment	46,442	46,716	+274
Supply Support Equipment	96,277	93,966	-2,311
Personnel & Command Support Equip	96,196	115,439	+19,243
Spares & Repair Parts	191,249	183,379	-7,870
Total Fiscal Year Program	\$2,421,431	\$2,427,299	+\$5,868

Explanation by Budget Activity
(\$ In Thousands)

1. SHIP SUPPORT EQUIPMENT (+\$6,811) - Net mid-year review increases for the Acquisition Center of Excellence (ACE), Other Navigation Equipment, and Hull, Mechanical, & Electrical Items under \$2 Million.
2. COMMUNICATIONS & ELECTRONIC EQUIPMENT (-\$2,181) - Net reduction used for unfunded Investment/Expense items and the Acquisition Center of Excellence (ACE).
3. AVIATION SUPPORT EQUIPMENT (-\$4,911) - Net reduction used for unfunded Investment/Expense items and the Acquisition Center of Excellence (ACE).
4. ORDNANCE SUPPORT EQUIPMENT (-\$3,187) - Net reduction used for unfunded Investment/Expense items and the Acquisition Center of Excellence (ACE).
5. CIVIL ENGINEERING SUPPORT (+\$274) - Net minor adjustment.
6. SUPPLY SUPPORT EQUIPMENT (-\$2,311) - Net reduction used for unfunded Investment/Expense items and the Acquisition Center of Excellence (ACE).
7. PERSONNEL & COMMAND SUPPORT (+\$19,243) - Net increase for unfunded Investment/Expense items.
8. SPARES & REPAIR PARTS (-\$7,870) - Net reduction used for unfunded Investment/Expense items and the Acquisition Center of Excellence (ACE).

Comparison of FY 1997 Financing as reflected
in FY 1997 Budget with 1997 Financing as
Shown in the FY 1998 Budget

(\$ In Thousands)

	Financing per FY 1997 Budget	Financing Per FY 1998 Budget	Increase (+) or Decrease (-)
Program Requirements (Total)	\$2,750,195	\$2,934,355	+\$184,160
Program Requirements (Service Account)	(2,714,195)	(\$2,892,355)	(+178,160)
Program Requirements (Reimbursable)	\$36,000	\$42,000	+6,000
Appropriation (Adjusted)	\$2,714,195	\$2,882,355)	+\$168,160

Explanation of Changes in Financing

The Fiscal Year 1996 program has changed since the presentation of the FY 1997 budget as noted below:

1. Program Requirements. There has been a net increase to the appropriation (adjusted) of \$168,160. This net change is comprised of an increase in program requirements (+\$178,160), less rescissions of (-\$10,000).

Comparison of FY 1997 program requirements as reflected
in the FY 1997 Budget with FY 1997 program requirements
as shown in the FY 1998 Budget

Summary of Requirements (\$ in Thousands)

	Total Program Requirements per FY 1997 Budget	Total Program Requirements per FY 1998 Budget	Increase (+) or Decrease (-)
Ships Support Equipment	\$868,175	\$815,611	-\$52,564
Communications and Electronic Equip	865,974	1,044,672	+178,698
Aviation Support Equipment	199,105	249,793	+50,688
Ordnance Support Equipment	464,903	468,410	+3,507
Civil Engineering Support Equip	38,057	43,943	+5,886
Supply Support Equipment	69,153	67,709	-1,444
Personnel and Command Support Equip	0	0	0
Spares and Repair Parts	208,828	202,217	-6,611
Total Fiscal Year Program	\$2,714,195	\$2,892,355	+\$178,160

Explanation by Budget Activity
(\$ in Thousands)

1. Ships Support Equipment (-\$52,564) - Changes reflects FY 1997 Congressional reductions (-\$63,747), Congressional increases (+10,000), and below threshold reprogramming (BTR) actions (-\$1,183).
2. Communications and Electronics Equipment (+\$178,698) - Changes reflects FY 1997 Congressional reductions (-\$28,253), Congressional increases(+ \$204,674), and below threshold reprogramming (BTR) actions (+\$2,277).
3. Aviation Support Equipment (+\$50,688) - Changes reflects FY 1997 Congressional reductions (-\$8,079), Congressional increases(+ \$166,558), and transfers to the Air Force (-\$107,791).
- 4.) Ordnance Support Equipment (+\$3,507) - Changes reflects FY 1997 Congressional reductions (-\$17,033), Congressional increases(+ \$22,000), and below threshold reprogramming (BTR) actions (-\$1,460).
5. Civil Engineering Support Equipment (+\$5,886) - Changes reflects FY 1997 Congressional reductions (-\$931) and Congressional increases(+ \$6,817).
6. Supply Support Equipment (-\$1,444) - Changes reflects FY 1997 Congressional reductions (-\$1,444).
8. Spare and Repair Parts (-\$6,611) - Changes reflects FY 1997 Congressional reductions (-\$4,611) and below threshold reprogramming (BTR) actions (-\$2,000).

BUDGET ITEM JUSTIFICATION SHEET					DATE FEBRUARY 1997			
APPROPRIATION/BUDGET ACTIVITY OPN/BA-4 ORDNANCE SUPPORT EQUIPMENT					P-1 ITEM NOMENCLATURE GUN FIRE CONTROL EQUIPMENT (14UK/5110)			
	FY 96	FY 97	FY 98	FY 99	FY 00	FY 01	FY 02	FY 03
QUANTITY								
COST								
(In Millions)	4.0	10.2	9.8	22.5	35.7	18.6	18.7	19.4
<p>DESCRIPTION: (U) THIS PROGRAM PROVIDES FOR PROCUREMENT OF EQUIPMENT, MATERIALS AND ORDNANCE ALTERATIONS (ORDALTS) TO IMPROVE COMBAT EFFECTIVENESS OF AND MAINTAIN LOGISTIC SUPPORTABILITY OF GUN FIRE CONTROL SYSTEMS (GFCS) INSTALLED ON 71 SHIPS (65 MK 86; 6 MK 160) AND 9 SHORE INSTALLATIONS (8 MK 86; 1 MK 160).</p> <p>UK009 SWITCHBOARD ORDALTS- PROCURE ORDALTS FOR GFCS MK 86 SWITCHBOARDS TO IMPROVE WEAPON AND COMBAT SYSTEM DATA SWITCHING CAPABILITY; PROVIDE CONCURRENT CHANGES WITH OTHER ORDALTS; AND PROVIDE TECHNICAL DOCUMENTATION UPGRADES REQUIRED BY INTERFACING SYSTEM/EQUIPMENT ORDALTS.</p> <p>UK024 RMA (RELIABILITY, MAINTAINABILITY AND AVAILABILITY) MK 86- PROCURE PRODUCT IMPROVEMENT ORDALTS FOR GFCS MK 86 TO CORRECT PROBLEMS REPORTED BY FLEET UNITS; UPGRADE UNRELIABLE COMPONENTS AND REPLACE OBSOLETE COMPONENTS AND PARTS NO LONGER IN PRODUCTION. INSTALLATIONS TO BE IN SHIP CLASSES WITH MK86 CONFIGURATION. MK 86 ORDALTS WERE PROCURED IN PRIOR YEARS AND ARE BEING INSTALLED IN BLOCKS TO REDUCE TOTAL INSTALLATION COSTS.</p> <p>UK039 NIGHT VISION DEVICES - PROCURES NEW NIGHT VISION DEVICES (NVD) FOR SHIPS AND SHORE SITES. PROVIDES REPAIR OR REPLACEMENT OF NVD AND NVD TEST EQUIPMENTS.</p> <p>UK040 AN/SPQ-9B RADAR MK 86 - PROCURE AN/SPQ-9 IMPROVEMENT ORDALTS (AN/SPQ-9B RADAR) TO ADD ANTI-SHIP MISSILE DEFENSE (ASMD) CAPABILITY WHICH INCREASES THE RADAR CAPABILITY TO DETECT AND TRACK LOW-FLYING, VERY SMALL RADAR CROSS-SECTION TARGETS IN NATURAL AND MAN-MADE CLUTTER. INSTALLATIONS TO BE PERFORMED BY AIT IN THE FOLLOWING SHIP CLASSES: QTY=12 DD-963; QTY=5 LHA-1; QTY=4 DDG-993; QTY=27 CG-47; AND QTY=1 TRAINER.</p> <p>UK041 AN/SPQ-9B NON-RECURRING CONTRACTOR PRODUCTION SUPPORT -SUPPORTS AN/SPQ-9B RADAR CONTRACTOR TRAINING DOCUMENTATION/SUPPORT, PRODUCTION DRAWINGS AND DATA EFFORTS.</p> <p>UK830 AN/SPQ-9B PRODUCTION SUPPORT - SUPPORTS AN/SPQ-9B RADAR PROGRAM AND CONTRACTOR ASSOCIATED AREAS.</p> <p>UK5IN/UK6IN - INSTALLATION OF EQUIPMENTS- PROVIDES FUNDING TO INSTALL ORDALTS, FIELD CHANGES AND OTHER ALTERATIONS IN SHIPS (FLEET MODERNIZATION PROGRAM - FMP) AND SHORE SITES (NON-FLEET MODERNIZATION PROGRAM - NON-FMP).</p> <p>UK900--CONSULTING SERVICES PROVIDE EXPERTISE TO ENGINEERING TECHNICAL SUPPORT SERVICES ON EQUIPMENT, INCLUDING CONSULTATION AND RECOMMENDATION ON PRODUCTION ANALYSIS OF PROBLEMS WITH EQUIPMENT AND INTERFACES. PERFORM TECHNICAL REVIEWS AND SUITABILITY STUDY OF CURRENT SYSTEMS.</p>								

UNCLASSIFIED							DATE		
COST ANALYSIS							FEBRUARY 1997		
APPROPRIATION/BUDGET ACTIVITY				P-1 ITEM NOMENCLATURE					
OPN/BA-4 ORDNANCE SUPPORT EQUIPMENT				GUN FIRE CONTROL EQUIPMENT (14UK/5110)					
ELEMENT OF COST	IDENT CODE	TOTAL COST IN THOUSANDS OF DOLLARS							
			FY 96		FY 97		FY 98		FY 99
		QTY	TOTAL COST	QTY	TOTAL COST	QTY	TOTAL COST	QTY	TOTAL COST
<u>SURFACE SHIPS (N-86)</u>									
UK009 SWITCHBOARD O/A'S MK 86	A		44		48		48		47
UK024 RMA MK 86	A		1,221		2,049		1,359		1,160
UK039 NIGHT VISION DEVICES	A		509		506		471		535
UK040 AN/SPQ-9B RADAR MK 86	A		0	2	5,870	1	3,263	6	16,975
UK041 AN/SPQ-9B N/R CTR. PROD. SPT	A		0		0		1,547		0
UK830 AN/SPQ-9B PROD. SPT	A		0		533		1,700		1,625
UK5IN INSTALLATION OF EQUIPMENT (FMP)	A		1,916		1,016		528		1,146
UK6IN INSTALLATION OF EQUIPMENT (NON-FMP)	A		121		0		428		0
UKDSA DESIGN SUPPORT	A		0		0		194		812
UK900 CONSULTING SERVICES	A		223		215		215		214
TOTAL			4,034		10,237		9,753		22,514

P-1 SHOPPING LIST

UNCLASSIFIED								BUDGET PROCUREMENT HISTORY AND PLANNING			DATE FEBRUARY 1997
APPROPRIATION/BUDGET ACTIVITY OPN/BA-4 ORDNANCE SUPPORT EQUIPMENT							P-1 ITEM NOMENCLATURE GUN FIRE CONTROL EQUIPMENT (14UK/5110)				
LINE ITEM/ FISCAL YEAR	CONTRACTOR AND LOCATION	CONTRACT METHOD AND TYPE	CONTRACTED BY	AWARD DATE	DATE OF FIRST DELIVERY	QUANTITY	UNIT COST	SPECS AVAILABLE NOW	SPECS REV REQ'D	IF YES, WHEN AVAILABLE	
UK040											
FY 1997	NORDEN SYSTEMS, INC.	FPI	NAVSEA	Mar 97	May 98	2	2,935,000	YES	NO		
FY 1998	NORDEN SYSTEMS, INC.	FPI	NAVSEA	Jan 98	Mar 99	1	3,263,000	YES	NO		
FY 1999	NORDEN SYSTEMS, INC.	FPI	NAVSEA	Jan 99	Mar 00	6	2,829,000	YES	NO		
REMARKS											

UNCLASSIFIED

MODIFICATION TITLE: MK86; GUN FIRE CONTROL EQUIPMENT ORDALT ALTERATIONS
The Inventory Objective for this Item is 1569.

MODELS OF SYSTEMS AFFECTED: GFCS MK 86 Mods 9, 10, 12
DESCRIPTION/JUSTIFICATION: Product Capability, Safety, and Survivability and RMA Improvements
DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONE: Continuous Improvements to GFCS MK 86

FINANCIAL PLAN: (\$in Millions)	FY-96				FY-97		FY-98		FY-99		FY-00		FY-01		FY-02		FY-03		TO COMPLETE		TOTAL	
	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$
RDT&E																						
PROCUREMENT (UK024)																						
Kit Quantity																						
Installation Kits	1234	15.2			10	0.5	25	1.2	25	1.2	25	1.2	25	1.2	25	1.3	200	9.6			1569	31.4
Installation Kit Nonrecurring Equipment		1.6		2.1		0.9						1.6										6.2
Equipment Nonrecurring Engineering Change Orders																						
Unit Cost Data for Equipment		0.012				0.05		0.05		0.05		0.05		0.05		0.05		0.05				0.4
Training Equipment																						
Support Equipment																						
Other																						
Interim Contractor Support																						
Installation of Hardware																						
FY96 & Prior Equipment (1206 kits)	1175	4.0	37	1.0	0	0.0	22	0.6	0	0.0											1234	5.6
FY97 Equipment (0 kits)																					0	0.0
FY98 Equipment (10 kits)							10	0.6													10	0.6
FY99 Equipment (25 kits)									25	0.5											25	0.5
FY00 Equipment (25 kits)											25	0.5									25	0.5
FY01 Equipment (0 kits)													25	0.5							25	0.5
FY02 Equipment (25 kits)																			25	0.4	25	0.4
FY03 Equipment (25 kits)																			25	0.4	25	0.4
To Complete (200 kits)																			200	9.6	200	9.6
Total Installation Cost	1175	4.0	37	1.0	0	0.0	32	1.2	25	0.5	25	0.5	25	0.5	25	0.5	0	0.0	250	10.4	1569	18.0
Total Cost		20.8		3.1		1.4		2.4		1.7		3.3		1.7		1.3		20.0				54.3

METHOD OF IMPLEMENTATION: ALTERATION INSTALLATION TEAM
CONTRACT DATE: Prior Year: N/A Budget Year 1: N/A Budget Year 2: N/A
PRODUCTION DELIVERY DATE: Prior Year: N/A Budget Year 1: N/A Budget Year 2: N/A

INSTALLATION SCHEDULE: INPUT	FY-95				FY-96				FY-97				FY-98				FY-99				FY-00				FY-01				FY-01				TO COMP.	TOTAL
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4		

OUTPUT

Note: Quantities above reflect number of ORDALT kit sets. Individual ORDALTs are being procured, packaged, and installed in sets to lower overall costs.

- MK86 BASELINE ORDALTS: 13	}	FY96 & Prior
- MK86 BLOCK 1 UPGRADE ORDALTS: 4		
- MK86 BLOCK 2 UPGRADE ORDALTS: 5		
- MK86 RMA-1 UPGRADE ORDALTS: 3		FY97 - 00
- MK86 RMA-2 UPGRADE ORDALTS: 3		FY01 - 03

Exhibit P-3A

UNCLASSIFIED

MODIFICATION TITLE:

AN/SPQ-9B Radar Improvement to the MK 86 Gun Fire Control System (GFCS) Mod 13

MODELS OF SYSTEMS AFFECTED:

GFCS Mod 10

The Inventory Objective for this Item is 47.

DESCRIPTION/JUSTIFICATION:

Adds Anti-Ship Missile Defense mode; detects & tracks low-flying, extremely small radar cross section targets in clutter.

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONE:

MS IV/II 10/94, CA 10/13/94 CDR 7/95, DT/OT 11/97, MS III 2/99.

FINANCIAL PLAN: (\$ in Millions)	FY-96		FY-97		FY-98		FY-99		FY-00		FY-01		FY-02		FY-03		TO COMPLETE		TOTAL	
	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$
RDT&E	2	34.1		9.9		3.8		2.7		1.7		1.8		1.8		1.9		0.0	2	57.7
PROCUREMENT (UK040)																				
Kit Quantity			2		1		6		9		2		4		4		19		47	
Installation Kits																				
Installation Kit Nonrecurring																				
Equipment			2	5.9	1	3.3	6	17.0	9	27.5	2	6.8	4	13.6	4	14.2	19	55.4	47	147.5
Equipment Nonrecurring																				
Engineering Change Orders																				
Unit Cost Data for Equipment				2.9		3.3		2.8		3.1		3.4		3.4		3.6		3.1		3.1
Other		0.3		0.7		3.5		1.8		1.9		2.0		1.3		0.5		4.0		12.1
Interim Contractor Support																				
Installation of Hardware																				
FY97 Equipment (2 kits)*					2	1.1													2	1.2
FY98 Equipment (1 kits)							1	0.8											1	0.8
FY99 Equipment (6 kits)									6	4.1									6	4.1
FY00 Equipment (9 kits)											9	6.0							9	6.0
FY01 Equipment (3 kits)													2	1.6					2	1.6
FY02 Equipment (4 kits)															4	2.8			4	2.8
FY03 Equipment (4 kits)																	4	2.2	4	2.2
To Complete (19 kits)																	19	13.2	19	13.2
Total Installation Cost			0	0.0	2	1.1	1	0.8	6	4.1	9	6.0	2	1.6	4	2.8	23	15.4	47	31.8
Total Cost		0.3		6.6		7.9		19.6		33.5		14.8		16.5		17.55		74.8		191.5

* One FY 1997 kit is a non-FMP install.

METHOD OF IMPLEMENTATION:

ALTERATION INSTAADMINISTRATIVE LEADTIME 6 MONTHS

PRODUCTION LEADTIME: 14 MONTHS

CONTRACT DATE:

Prior Year: N/A

Current Year:

MARCH 1997

Budget Year 1:

JAN 1998

Budget Year 2:

JAN 1999

PRODUCTION DELIVERY DATE:

Prior Year: N/A

Current Year:

MAY 1997

Budget Year 1:

MARCH 1999

Budget Year 2:

MARCH 2000

INSTALLATION SCHEDULE: INPUT	FY-96				FY-97				FY-98				FY-99				FY-00				FY-01				FY-02				FY-03				TO COMP.	TOTAL
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4						
FY96 & PRIOR																																0		
FY97																																0		
FY98												1																				1		
FY99														1	1	0	0															2		
FY00															0	2	2	2														6		
FY01																			2	2	2	3										9		
FY02																							1	0	1	0						2		
FY03																													1	1	1	1	4	
TO COMPLETE																															23	23		
TOTAL																																47		
OUTPUT																																		
FY96 & PRIOR																																0		
FY97																																0		
FY98												1																					1	
FY99														0	1	1	0															2		
FY00																		0	0	2	2											4		
FY01																					2	2	2	2								8		
FY02																							3	1	0	1						5		
FY03																													0	1	1	1	3	
TO COMPLETE																															24	24		
TOTAL																																47		

CLASSIFICATION:

UNCLASSIFIED

BUDGET ITEM JUSTIFICATION SHEET P-40					DATE: February 1997			
APPROPRIATION/BUDGET ACTIVITY					P-1 ITEM NOMENCLATURE			
OPN/BA-4 ORDNANCE SUPPORT EQUIPMENT					MK 92 FIRE CONTROL SYSTEM 84UU BLI # 520800			
	1996	1997	1998	1999	2000	2001	2002	2003
QUANTITY								
COST (In Millions)	\$0.7	\$1.8	\$0.9	\$1.0	\$1.1	\$1.1	\$1.2	\$1.2
<p>UU001 - Fleet Support ORDALTs - Provides hardware, and related material to modify Fire Control System MK 92 MOD 6 and Guided Missile Launching System MK 13 installed in 12 CORT/IADT FFG 7 Class Ships. Modifications correct safety, environmental, or obsolescence deficiencies to maintain the readiness of the AAW/ASUW Weapons System mission for self and area defense against hostile air and surface threats, including anti-ship missile threats. Hardware is procured as Ordnance Alterations (ORDALTs). Installation of ORDALTs will be accomplished by either Alteration Installation Teams (AIT) or in conjunction with routine repair actions planned in the fiscal years following procurement.</p> <p>UU51N - FMP Install - Funding for installation of ORDALTs into FFG 7 Class ships by AIT.</p>								

CLASSIFICATION:

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CLASSIFICATION:

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WEAPON SYSTEM COST ANALYSIS P-5									DATE: February 1997	
APPROPRIATION/BUDGET ACTIVITY				P-1 ITEM NOMENCLATURE/SUBHEAD						
OPN /BA-4 ORDNANCE SUPPORT EQUIPMENT				MK 92 FIRE CONTROL SYSTEM / 84UU						
COST CODE	ELEMENT OF COST	IDENT CODE	TOTAL COST IN THOUSANDS OF DOLLARS							
			FY 1996		FY 1997		FY 1998		FY 1999	
			QTY	TOTAL COST	QTY	TOTAL COST	QTY	TOTAL COST	QTY	TOTAL COST
UU001	FLEET SUPPORT ORDALTS	A		0	12	1,841	12	792	12	867
UU5IN	FMP INSTALLATION	A		718		0		114		118
	TOTAL			718		1,841		906		985

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WEAPON SYSTEM COST ANALYSIS									DATE:		
P-5A									February 1997		
APPROPRIATION/BUDGET ACTIVITY					P-1 ITEM NOMENCLATURE				SUBHEAD		
OPN / BA-4 ORDNANCE EQUIPMENT					MK 92 FIRE CONTROL SYSTEM				84UU		
COST CODE	LINE ITEM/ FISCAL YEAR	CONTRACTOR AND LOCATION	CONTRACT METHOD & TYPE	CONTRACTED BY	AWARD DATE	DATE OF FIRST DELIVERY	QUANTITY	UNIT COST (000)	SPECS AVAILABLE NOW	SPEC REV REQ'D	IF YES WHEN AVAILABLE
UU001	FLEET SUPPORT ORDALTS										
	FY 95 MOD 6 BLK 5	LORAL	SS/FFP	NAVSEA	01/95	01/96	12	312.0	YES	NO	
	FY 95 MOD 6 BLK 5	LORAL	SS/FFP	NAVSEA	01/95	01/96	*	1,913.0	YES	NO	
	FY 97 MOD 6 BLK 6	LOCKHEED	SS/FFP	NAVSEA	01/97	01/98	12	153.4	YES	NO	
	FY 98 MOD 6 BLK 7	LOCKHEED	SS/FFP	NAVSEA	01/98	01/99	12	66.0	NO		
	FY 99 MOD 6 BLK 8	LOCKHEED	SS/FFP	NAVSEA	01/99	01/00	12	72.2	NO		
REMARKS											
* Non-Recurring Engineering											

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CLASSIFICATION:

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P3A	INDIVIDUAL MODIFICATION																			
MODIFICATION TITLE:		UU001 FLEET SUPPORT ORDALTS: MK 92 FIRE CONTROL SYSTEM																		
MODELS OF SYSTEM AFFECTED:		FIRE CONTROL SYSTEM MK 92 MOD 6																		
DESCRIPTION/JUSTIFICATION:		CORRECTS SAFETY, ENVIRONMENTAL OR OBSOLESCENCE DEFICIENCIES TO MAINTAIN COMBAT READINESS																		
DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES:		ORDALT DEFICIENCY CORRECTION PROGRAM																		
	FY 96	FY 97	\$M	FY 98	\$M	FY 99	\$M	FY 00	\$M	FY 01	\$M	FY 02	\$M	FY 03	\$M	TO COMP	TO COMP	TOTAL	TOTAL	
	QTY	& PRIOR QTY	FY 97	QTY	FY 98	QTY	FY 99	QTY	FY 00	QTY	FY 01	QTY	FY 02	QTY	FY 03	QTY	COST	QTY	COST	
FINANCIAL PLAN (IN MILLIONS)																				
RDT&E			0.00		0.00		0.00		0.00		0.00		0.00		0.0				0.00	
PROCUREMENT		12	6.00	12	1.84	12	0.79	12	0.87	12	0.94	12	1.02	12	1.06	12	1.11	96	13.64	
INSTALLATION KITS		12	4.10	12	1.84	12	0.79	12	0.87	12	0.94	12	1.02	12	1.06	12	1.11	96	11.74	
INSTALLATION KITS NONRECURRING EQUIPMENT			1.90																1.90	
EQUIPMENT NONRECURRING																			0.00	
ENGINEERING CHANGE ORDERS DATA																			0.00	
TRAINING EQUIPMENT																			0.00	
SUPPORT EQUIPMENT OTHER																			0.00	
INTERIM CONTRACTOR SUPPORT																			0.00	
INSTALLATION OF HARDWARE																				
FY 96 AND PRIOR EQUIPMENT (12KITS)		12	0.72															12	0.72	
FY 97 Equipment (12 Kits)						12	0.11											12	0.11	
FY 98 Equipment (12 kits)								12	0.12									12	0.12	
FY 99 Equipment (12 kits)									12	0.12								12	0.12	
FY 00 Equipment (12 kits)											12	0.12						12	0.12	
FY 01 Equipment (12 kits)													12	0.12				12	0.12	
FY 02 Equipment (12 kits)															12	0.12		12	0.12	
TO COMPLETE (12 Kits)																	12	0.12	0.12	
TOTAL INSTALLATION COST			0.72		0.00		0.11		0.12		0.12		0.12		0.12		0.12	96	1.55	
TOTAL PROCUREMENT COST			6.00		1.84		0.79		0.87		0.94		1.02		1.06		1.11		0.00	
TOTAL COST			6.72		1.84		0.90		0.99		1.06		1.14		1.18		1.23		0.12	
METHOD OF IMPLEMENTATION: AIT		ADMINISTRATIVE LEADTIME:				1-12 MONTHS				PRODUCTION LEADTIME:				12 MONTHS						
CONTRACT DATE:		PRIOR YEAR: N/A				CURRENT YEAR: 1/97				BUDGET YEAR: 1/98				BUDGET YEAR 2: 1/99						
PRODUCTION DELIVER DATE:		PRIOR YEAR: N/A				CURRENT YEAR: 1/98				BUDGET YEAR: 1/99				BUDGET YEAR 2: 1/00						
INSTALLATION SCHEDULE:																				
INPUT		FY 1996	FY 1997	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	TC	TOTAL									
		1,2,3,4	1,2,3,4	1,2,3,4	1,2,3,4	1,2,3,4	1,2,3,4	1,2,3,4	1,2,3,4	1,2,3,4										
FY 96 AND PRIOR		12																12		
FY 97				12														12		
FY 98					12													12		
FY 99						12												12		
FY 00							12											12		
FY 01								12										12		
FY 02									12									12		
FY 03										12								12		

CLASSIFICATION:

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REQUIREMENTS STUDY - NOT-INSTALLED NONCONSUMABLES P-23B							DATE : February 1997		
APPROPRIATION/BUDGET ACTIVITY				P-1 ITEM NOMENCLATURE					
OPN / BA-4 ORDNANCE SUPPORT EQUIPMENT				MK 92 FIRE CONTROL SYSTEM UU001					
ITEM/PROJECT UNIT	TOTAL I0 / REQUIREMENT	QUANTITY ON HAND & NOT IN USE	QUANTITY IN USE	QUANTITY DUE IN WITH FY 95 & PRIOR FUNDS	QUANTITY DUE IN WITH FY 96 PROGRAM FUNDS	PLANNED BUDGET YEAR PROCUREMENT FY 97	PLANNED BUDGET YEAR PROCUREMENT FY 98	BALANCE	PHASING RATIONALE
#1 MOD 6 BLK 5	12	0	12	0	0	0	0	0	
#2 MOD 6 BLK 6	12	0	0	0	0	12	0	0	
#3 MOD 6 BLK 7	12	0	0	0	0	0	12	0	
ITEM #1 MOD 6 BLK 5 FFG 50, 51, 36, 57, 48, 47, 54, 53 55, 52, 59, 61,	ITEM #2 MOD 6 BLK 6 FFG 50, 51, 36, 57, 48, 47, 54, 53 55, 52, 59, 61,		ITEM # 3 MOD 6 BLK 7 FFG 50, 51, 36, 57, 48, 47, 54, 53 55, 52, 59, 61						
TOTAL 12	TOTAL 12		TOTAL 12						

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CLASSIFICATION:

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CLASSIFICATION: **UNCLASSIFIED**

BUDGET ITEM JUSTIFICATION SHEET P-40					DATE: Feb 1997			
APPROPRIATION/BUDGET ACTIVITY					P-1 ITEM NOMENCLATURE			
Other Procurement, Navy BA-4: Ordnance Support Equipment					HARPOON Support Equipment (J4U0) (522700) (PEO(CU))			
	FY 1996	FY 1997	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003
COST (In Millions)	\$2.8	\$0.1	\$0.2	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
<p>The HARPOON Weapon System (HWS) provides a ship, aircraft and submarine-launched all-weather, over-the-horizon, anti-ship cruise missile system effective against enemy destroyers, cruisers, surfaced submarines, patrol craft and other enemy shipping (e.g., merchant, surveillance, etc.). The missile uses altitude reference mid-course guidance with an active radar seeker for target acquisition and terminal guidance. The following platforms are configured to provide HARPOON command and control functions to launch the HARPOON missile:</p> <p style="margin-left: 40px;">Ship Launch Platforms: DD-963, CGN, FFG-7, CG-47, DDG-51 and DDG-993</p> <p style="margin-left: 40px;">Air Launch Platforms: P-3, A-6, F/A-18 and S-3</p> <p style="margin-left: 40px;">Submarine Launch Platforms: 637 and 688 CLASSES</p> <p>OPN funds are used for procurement of items peculiar to ship and submarine HARPOON Command and Launch Control Systems. Funds for procurement of air launch platforms, new construction and the missile are provided by other appropriations (APN/SCN/WPN). OPN procurement is structured to be compatible with projected Ordnance Alteration (ORDALT) installation schedules to optimize fleet introduction of HARPOON weapon improvements.</p> <p>The HWS was granted Approval for Service Use (ASU) per CNO ltr Ser 354H/C 394280 of 19 February 1981. The HARPOON Ship Command and Launch Control System (HSCLCS) AN/SWG-1A(V) was granted Approval for Full Rate Production (AFRP) per ASN(S&L) memo of 12 May 1989.</p> <p>The OPN funding will support a series of ORDALTS to improve HARPOON readiness in the fleet. Computer program improvements to the HSCLCS AN/SWG-1A(V) will correct deficiencies identified in trouble reports, incorporate operational capabilities recommended by the fleet and further enhance operational safety and reliability.</p> <p>Funding in FY 1997 and FY 1998 provide for the installation of Shipboard HSCLCS ORDALT Kits procured in previous fiscal years. These Shipboard ORDALTS will be installed as part of the Fleet Modernization Program (FMP). Budget reflects the transfer of design services into the appropriate equipment P-1 line item beginning in FY 1998.</p>								

CLASSIFICATION:

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WEAPONS SYSTEM COST ANALYSIS										DATE:	
P-5										Feb 1997	
APPROPRIATION/BUDGET ACTIVITY					P-1 ITEM NOMENCLATURE/SUBHEAD						
Other Procurement, Navy BA-4: Ordnance Support Equipment					HARPOON Support Equipment (J4U0)						
COST CODE	ELEMENT OF COST	IDENT CODE	TOTAL COST IN THOUSANDS OF DOLLARS								
			FY 1996		FY 1997		FY 1998		FY 1999		
			QTY	TOTAL COST	QTY	TOTAL COST	QTY	TOTAL COST	QTY	TOTAL COST	
U0004	ORDALTS HSCLCS-1A Computer Program Upgrade ORDALT Kits Object Oriented Analysis (OOA) and Design (OOD) and Software Coding and Testing Production Support	A	58	2,461 (110) (1,690) (661)		0		0		0	
U0910	Installation of Equipment (FMP)			376		96		207		0	
U0920	Design Service Agent (FMP Install)			0		0		36		0	
				2,837		96		243		0	

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MODIFICATION INSTALLATION SUMMARY (EXHIBIT P-3N) (TOA, Dollars in Millions)							DATE Feb 1997		
APPROPRIATION/BUDGET ACTIVITY: Other Procurement, Navy BA-4: Ordnance Support Equipment					P-1 ITEM NOMENCLATURE HARPOON Support Equipment (J4U0)				
System/Modification	FY 1996	FY 1997	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	TOTAL
HARPOON SUPPORT EQUIPMENT ORDALT KITS	0.4	0.1	0.2	0.0	0.0	0.0	0.0	0.0	0.7
TOTAL	0.4	0.1	0.2	0.0	0.0	0.0	0.0	0.0	0.7

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CLASSIFICATION:

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CLASSIFICATION: **UNCLASSIFIED**

P3A		INDIVIDUAL MODIFICATION																			
MODIFICATION TITLE: WEAPON SYSTEM ORDALTS																					
MODELS OF SYSTEM AFFECTED: CGs, CGNs, DDs, DDGs, FFGs																					
DESCRIPTION/JUSTIFICATION:																					
Weapon System ORDALT Kits include Launcher Relay Assembly (LRA) Cable Corrosion, HSCLCS-1A Embedded Trainer (HET), HSCLCS-1A Selective Engagement, HSCLCS-1A Graphic Display Unit/Graphic Data Processor (GDU/GDP) Enhancement, HSCLCS-1A ORDALTS, HARPOON Guided Missile Simulator (HGMS) and HOTTS Retrofit																					
ORDALTS will enhance fleet readiness, correct system deficiencies and further enhance operational safety and reliability.																					
DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES:																					
		FY 1996 & Prior		FY 1997		FY 1998		FY 1999		FY 2000		FY 2001		FY 2002		FY 2003		TC		TOTAL	
		QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$
FINANCIAL PLAN (IN MILLIONS)																					
RDT&E																					
PROCUREMENT																					
INSTALLATION KITS		1071	31.9	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	1071	31.9
INSTALLATION KITS - UNIT COST			0.030		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		
INSTALLATION KITS NONRECURRING			27.7		0.0		0.0		0.0		0.0		0.0		0.0		0.0		0.0		27.7
EQUIPMENT																					
EQUIPMENT NONRECURRING																					
ENGINEERING CHANGE ORDERS																					
DATA																					
TRAINING EQUIPMENT																					
SUPPORT EQUIPMENT																					
OTHER (Production Support)			7.2		0.0		0.0		0.0		0.0		0.0		0.0		0.0		0.0		7.2
INTERIM CONTRACTOR SUPPORT																					
INSTALLATION OF HARDWARE																					
FY 1996 EQUIPMENT & PRIOR		971	3.6	42	0.1	58	0.2													1071	3.9
FY 1997 EQUIPMENT																					
FY 1998 EQUIPMENT																					
FY 1999 EQUIPMENT																					
FY 2000 EQUIPMENT																					
FY 2001 EQUIPMENT																					
FY 2002 EQUIPMENT																					
FY 2003 EQUIPMENT																					
TO COMPLETE																		0	0.0	0	0.0
TOTAL INSTALLATION COST		971	3.6	42	0.1	58	0.2	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	1071	3.9
TOTAL PROCUREMENT COST		1071	70.4	0	0.1	0	0.2	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	1071	70.7
TOTAL COST			70.4		0.1		0.2		0.0		0.0		0.0		0.0		0.0		0.0		70.7
METHOD OF IMPLEMENTATION: Alteration Installation Team (AIT)																					
CONTRACT DATE:		FY 1997:	N/A					FY 1998:	N/A					FY 1999:	N/A						
PRODUCTION DELIVER DATE:		FY 1997:	N/A					FY 1998:	N/A					FY 1999:	N/A						
The total program quantity of 1,071 units reflects the inventory objective for this item.																					

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CLASSIFICATION: **UNCLASSIFIED**

P3A (Continued)

INDIVIDUAL MODIFICATION (Continued)

MODIFICATION TITLE: **WEAPON SYSTEM ORDALTS**

INSTALLATION SCHEDULE:

INPUT ==>	FY 1996 & Prior	FY 1997				FY 1998				FY 1999				FY 2000				FY 2001				FY 2002				FY 2003				TC	TOTAL
		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4		
FY 1996 & Prior	971	0	20	10	12	18	20	20	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1071
FY 1997	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
FY 1998	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
FY 1999	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
FY 2000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
FY 2001	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
FY 2002	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
FY 2003	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
To Complete	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

TOTAL INPUT 1071

OUTPUT ==>	FY 1996 & Prior	FY 1997				FY 1998				FY 1999				FY 2000				FY 2001				FY 2002				FY 2003				TC	TOTAL
		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4		
FY 1996 & Prior	971	0	20	10	12	18	20	20	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1071
FY 1997	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
FY 1998	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
FY 1999	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
FY 2000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
FY 2001	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
FY 2002	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
FY 2003	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
To Complete	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

TOTAL OUTPUT 1071

Installation Schedule: FY 93 and prior procurements during 5 day pier-side availability as scheduled by SURFLANT/PAC/NSWC/PHD

Installation Schedule: FYs 94-96 procurements during 1 day pier-side availability as scheduled by SURFLANT/PAC/NSWC/PHD

P-3A

CLASSIFICATION:

UNCLASSIFIED

BUDGET ITEM JUSTIFICATION SHEET P-40					DATE: February 1997			
APPROPRIATION/BUDGET ACTIVITY OTHER PROCUREMENT, NAVY (OPN) BA-4 ORDNANCE SUPPORT EQUIPMENT					P-1 ITEM NOMENCLATURE TARTAR SUPPORT EQUIPMENT LI 5233			
	FY 1996	FY 1997	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003
QUANTITY								
COST (In Millions)	\$17.1	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
<p>* FY97 and beyond budgeted in the P-1 Engagement Systems Support #151</p>								

UNCLASSIFIED

CLASSIFICATION:

UNCLASSIFIED

BUDGET ITEM JUSTIFICATION SHEET P-40					DATE: February 1997			
APPROPRIATION/BUDGET ACTIVITY OTHER PROCUREMENT, NAVY (OPN) BA-4 ORDNANCE SUPPORT EQUIPMENT					P-1 ITEM NOMENCLATURE POINT DEFENSE SUPPORT EQUIPMENT LI 52			
	FY 1996	FY 1997	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003
QUANTITY								
COST (In Millions)	\$6.5*	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
<p>*</p> <p>FY97 and beyond budgeted in the P-1 NATO Seasparrow #152</p>								

UNCLASSIFIED

CLASSIFICATION: **UNCLASSIFIED**

BUDGET ITEM JUSTIFICATION SHEET P-40					DATE: February 1997			
APPROPRIATION/BUDGET ACTIVITY OPN/4 - ORDNANCE SUPPORT EQUIPMENT					P-1 ITEM NOMENCLATURE AIRBORNE ECM/ECCM (84U1)-5235			
	1996	1997	1998	1999	2000	2001	2002	2003
QUANTITY								
COST (In Millions)	\$1.1	\$1.1	\$0.5	\$0.3	\$0.0	\$0.0	\$0.0	\$0.0
<p>JUSTIFICATION: The Surface Navy uses special electronic countermeasures (ECM) support equipment to simulate observed, projected and technologically feasible airborne ECM threat environments. This equipment provides a family of ECM waveform generators, special antennas, microwave components and exciter modules. These assets are used in various aircraft, land-based and target configurations as necessary to stress the electronic counter countermeasure (ECCM) designs of all ship air defense systems. This is necessary to ensure the ECM/ECCM readiness of ship air defense systems at the time of deployment.</p> <p>This line provides for the procurement of the core ECM equipment which support ECM/ECCM evaluations of all surface Navy air defense systems. There are three continuing cost code items, namely U1005, U1006, and U1018.</p> <p>U1005/Jammer Equipment Support and U1006/Special Microwave Components are continuing level of effort items, typically involving the purchase of many small components, necessary to sustain various ECM equipment configurations for particular applications and platforms.</p> <p>U1018/Special Purpose Jammer Modules provides for procurement of special purpose jammer configurations, typically consisting of a number of jamming modules, which provide ECM threat simulation capability for particular applications.</p>								

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P-1 SHOPPING LIST
ITEM NO. PAGE NO.
150 1

CLASSIFICATION:

UNCLASSIFIED

CLASSIFICATION:**UNCLASSIFIED**

BUDGET ITEM JUSTIFICATION SHEET P-40					Date: February 1997			
APPROPRIATION/BUDGET ACTIVITY					P-1 ITEM NOMENCLATURE			
OTHER PROCUREMENT, NAVY BA-4 SUPPORT EQUIPMENT					ENGAGEMENT SYSTEMS SUPPORT (84UJ) 523600			
	1996	1997	1998	1999	2000	2001	2002	2003
QUANTITY								
COST (In Millions)	* \$26.4	\$14.7	\$6.9	\$1.7	\$1.3	\$1.3	\$1.3	\$1.3
<p>ITEM DESCRIPTION/JUSTIFICATION: The AREA AAW DEFENSE ENGAGEMENT SYSTEM PROGRAM provides for computer program improvements and ordnance alteration material to ENGAGEMENT Missile Systems currently installed in ten (10) operational ships. The computer programs and ordnance alterations are needed to improve systems performance, to improve operational capability and to replace low reliability and obsolete components. The ENGAGEMENT SYSTEMS program supports the following areas:</p> <ol style="list-style-type: none"> 1. RM&A modifications of DDG 993 and CGN 36 Class Ship Weapon Systems to provide capability to fire the SM-2 (MR) Missiles. 2. Computer Program and Documentation. 3. Modifications to downlink system for enhanced ECM performance. 4. Modification to Radar Environment Simulation System (ERESS). 5. Modification of DDG 993 and CGN 36 Class ship Weapon Systems to provide new missile improvement capabilities. 6. Installation of equipment required for fleet modernization. 7. Modify MK 26 GMLS to improve Reliability, Maintainability and Availability (RM&A). <p>The SM-2 modification provides changes to the ENGAGEMENT SYSTEMS Missile Fire Control System (MFCS) on the DDG 993 and CGN 36 ship Class and GFE trainers to upgrade the AAW capability to utilize the SM-2 Missile. This ORDALT group consists of improvements to correct reliability, improve equipment safety, shock hardening, and correct installation and performance anomalies revealed during Fleet Operational Testing and Evaluation. The ORDALTs are usually minor in scope and are emergent, requiring corrective action to resolve fleet reported problems. Various ordalts are required to fully implement SM-2 capabilities and correct existing problems.</p> <p>FY 1996 funds are identified under P-1 number 148 and 170.</p>								

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CLASSIFICATION:
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BUDGET ITEM JUSTIFICATION SHEET P-40		DATE: February 1997
APPROPRIATION/BUDGET ACTIVITY OTHER PROCUREMENT, NAVY BA-4 SUPPORT EQUIPMENT	P-1 ITEM NOMENCLATURE ENGAGEMENT SYSTEMS SUPPORT (84UJ) 523600	
<p><u>UJ034</u></p> <p><u>MK 26 MIDLIFE UPGRADE:</u> Currently, MK 26 Guided Missile Launching system (GMLS) ranks as one of the most troubled systems in the fleet. Due to obsolete parts and less than optimum design of major hydro-mechanical components, Reliability, Maintainability and Availability (RM&A) of MK 26 GMLS has been degrading, thus decreasing system availability and leading to eventual shutdown of AAW capability in DDG 993 and CG 47 Class ships. Mk 26 Midlife Upgrade replaces the existing control system with a microprocessor-based control system eliminating the need for obsolete parts. Major items such as transmissions and controls will be replaced to fix many of the launching system's mechanical problems. These ORDALTS will increase availability of MK 26 GMLS while reducing excessive field service and overhaul cost. Six units have been procured in prior years, with eleven units remaining to complete the program at a total cost of \$21.9M.</p> <p><u>UJ035</u></p> <p><u>COMPUTER PROGRAMS AND DOCUMENTATION:</u> This line provides for the Computer Programs and Documentation associated with the changes and the installation and checkout of changes to the MFCS, AN/SYR-1, WDS MK 14, GMLS, CDS, CFCS, Detection Systems, Inertial Navigation System and all other interface changes to the Engagement Subsystem. These changes are those which result after the R&D effort has delivered the baseline products to the first ship of the class. These changes are sea, midlife improvements, Fleet utilization, deficiencies in hull configurations, such as four MFCSs vice two MFCSs and GMLS MK 13 vice GMLS MK 26. Computer programs and documentation updates require extensive effort in the areas of Performance Definition, Design Definition, Implementation, Test, and Life Cycle Support. This effort requires updating to reflect these modifications to Performance specifications, Design specifications, Interface Design Specifications, Simulations/Support tools, Operators Manuals and all associated training materials. Two computer program deliveries are reflected in this budget, which equate to short term and long term reliability improvements.</p> <p><u>UJ5IN</u></p> <p>INSTALLATION: Funding is for the installation of equipment, including Fleet Modernization Program installations.</p> <p><u>UJDSA</u></p> <p>The budget reflects the transfer of design services into the appropriate equipment P-1 line item in accordance with full funding policy FY 98 and out.</p>		

CLASSIFICATION: UNCLASSIFIED

WEAPON SYSTEM COST ANALYSIS EXHIBIT (P-5)										DATE: February 1997
APPROPRIATION/BUDGET ACTIVITY OTHER PROCUREMENT, NAVY BA-4 ORDNANCE SUPPORT EQUIPMENT					P-1 ITEM NOMENCLATURE/SUBHEAD ENGAGEMENT SUPPORT EQUIPMENT(84UJ) 523600 TOTAL COST IN THOUSANDS OF DOLLARS					
COST CODE	ELEMENT OF COST	IDENT CODE	FY 1996		FY 1997		FY 1998		FY 1999	
			QTY	TOTAL COST	QTY	TOTAL COST	QTY	TOTAL COST	QTY	TOTAL COST
UJ001	RM&A ORDALTS			4,935		1,526		1,214		473
UJ034	MK 26 MID-LIFE UPGRADE		7	14,222	4	8,236				
UJ035	COMPUTER PROG & DOC			2,500		1,613		815		838
UJ5IN	INSTALLATION OF EQUIP(FMP)			4,765		3,366		4,106		418
UJDSA	DESIGN AGENT							746		
	TOTAL			26,422		14,741		6,881		1,728

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P-1 SHOPPING LIST

CLASSIFICATION: UNCLASSIFIED

CLASSIFICATION: UNCLASSIFIED

BUDGET PROCUREMENT HISTORY AND PLANNING									PLANNING EXHIBIT (P-5A)		DATE
											February 1997
APPROPRIATION/BUDGET ACTIVITY OTHER PROCUREMENT, NAVY BA-4 SUPPORT EQUIPMENT					P-1 ITEM NOMENCLATURE ENGAGEMENT SYSTEMS SUPPORT 523600				SUBHEAD 84UJ		
COST CODE	LINE ITEM/ FISCAL YEAR	CONTRACTOR AND LOCATION	CONTRACT METHOD & TYPE	CONTRACTED BY	AWARD DATE	DATE OF FIRST DELIVERY	QTY	UNIT COST (000)	SPECS AVAILABLE NOW	SPEC REV REQ'D	IF YES WHEN AVAILABLE
UJ034	MK 26 MIDLIFE UPGRADE										
	FY 96	FMC MINNEAPOLIS,MN	SS/FP	NAVSEA	5/96	1/97	7	\$1,688 *	YES	NO	
	FY 97	FMC MINNEAPOLIS, MN	SS/FP	NAVSEA	12/96	1/98	4	\$2,059*	YES	NO	
REMARKS											
* UJ034 - Does not include non-recurring costs.											

CLASSIFICATION: UNCLASSIFIED	
P3A MODIFICATION TITLE: ENGAGEMENT SYSTEM 523600/MK 26 GMLS MIDLIFE MODELS OF SYSTEMS AFFECTED: MK 26 GMLS MIDLIFE DESCRIPTION/JUSTIFICATION: OBSOLETE PARTS REPLACEMENT DDG 993 AND CG 47 CLASS DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES:	INDIVIDUAL MODIFICATION TO TO
	COST CODE: UJ034

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES:																TO COMP QTY	TO COMP COST	TOTAL QTY	TOTAL COST							
FINANCIAL PLAN (IN MILLIONS)	QTY	FY 96 & PRIOR	QTY	FY 97	QTY	FY 98	QTY	FY 99	QTY	FY 00	QTY	FY 01	QTY	FY 02												
<u>RDT&E</u>																			0	0.0						
<u>PROCUREMENT</u>																										
QUANTITY																										
INSTALLATION KITS																			0	0.0						
INSTALLATION KITS NON-RECURRING																			0	0.0						
EQUIPMENT																			13	26.5	4	8.2		0.7	17	34.7
EQUIPMENT NON-RECURRING																				10.7		1.1			0	12.5
ENGINEERING CHANGE ORDERS																									0	0.0
DATA																									0	0.0
TRAINING EQUIPMENT																									0	0.0
SUPPORT EQUIPMENT																									0	0.0
OTHER																									0	0.0
TOTAL																									17	47.2
INTERIM CONTRACTOR SUPPORT																									0	0.0

EQUIPMENT COST ESTIMATE													
ITEM	QTY	UNIT	PRICE	TOTAL	QTY	UNIT	PRICE	TOTAL	QTY	UNIT	PRICE	TOTAL	
FY96 EQUIPMENT & PRIOR	6		7.3	7	1.8								
FY97 EQUIPMENT					4		3.2						
FY98 EQUIPMENT													
FY99 EQUIPMENT													
FY00 EQUIPMENT													
FY01 EQUIPMENT													
FY02 EQUIPMENT													
FY03 EQUIPMENT													
TO COMPLETE													
TOTAL QTY													
TOTAL INSTALLATION COST			7.3		1.8		3.2		0.0		0.0		0.0
TOTAL PROCUREMENT COST			37.2		9.3		0.7		0.0		0.0		0.0
TOTAL COST			44.5		11.1		3.9		0.0		0.0		0.0

METHOD OF IMPLEMENTATION:	AIT	ADMINISTRATIVE LEADTIME: 6 MONTHS		PRODUCTION LEADTIME: 13 MONTHS
CONTRACT DATE:	PRIOR YEAR:	CURRENT YEAR: 3/95	BUDGET YEAR: 12/95	BUDGET YEAR: 12/96
PRODUCTION DELIVER DATE:	PRIOR YEAR:	CURRENT YEAR: 1/96	BUDGET YEAR: 1/97	BUDGET YEAR: 1/98

INSTALLATION SCHEDULE:									
	INPUT =====>	FY 95	FY 96	FY 97	FY 98	FY 99	FY 20	TC	TOTAL
		1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	
				00.00.00.00	00.00.00.00	00.00.00.00	00.00.00.00	00.00.00.00	0
	FY 96 & PRIOR		6	7					6
	FY 97				4				7
TOTAL	FY 98								4
									17
	OUTPUT =====>	FY 95	FY 96	FY 97	FY 98	FY 99	FY 20	TC	TOTAL
		1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	
			00.00.00.00	00.00.00.00	00.00.00.00	00.00.00.00	00.00.00.00	00.00.00.00	
	FY 96 & PRIOR		4 2	7					13
	FY 97				4				4
TOTAL	FY 98								17

P3A MODIFICATION: ENGAGEMENT SYSTEM 523600/RM&A ORDLTS														COST CODE: UJ001					
MODIFICATION TITLE: ENGAGEMENT SYSTEM 523600/RM&A ORDLTS																			
MODELS OF SYSTEMS AFFECTED: (MK-74) DDG 993 & CGN 36 CLASS																			
DESCRIPTION/JUSTIFICATION: UPGRADE ANTI-AIR WARFARE CAPABILITY TO UTILIZE SM-2 MISSILE																			
DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES:																			
	FY 96														TO	TO	TOTAL	TOTAL	
	QTY	PRIOR	QTY	FY 97	QTY	FY 98	QTY	FY 99	QTY	FY 00	QTY	FY 01	QTY	FY 02	COMP	COMP	QTY	COST	
<u>FINANCIAL PLAN (IN MILLIONS)</u>																			
																		0	0.0
<u>PROCUREMENT</u>																			
QUANTITY																		0	0.0
INSTALLATION KITS																		0	0.0
INSTALLATION KITS NON-RECURRING																		0	0.0
EQUIPMENT																		VAR	4.1
EQUIPMENT NON-RECURRING																		0	1.7
ENGINEERING CHANGE ORDERS																		0	0.0
DATA																		0	0.0
TRAINING EQUIPMENT																		0	0.0
SUPPORT EQUIPMENT																		0	0.0
OTHER																		0	0.0
INTERIM CONTRACTOR SUPPORT																		0	0.0
<u>INSTALLATION OF HARDWARE</u>																			
FY96 EQUIPMENT & PRIOR																		0	1.60
FY97 EQUIPMENT																		0	0.40
FY98 EQUIPMENT																		0	0.40
FY99 EQUIPMENT																		0	0.40
FY00 EQUIPMENT																		0	0.00
FY01 EQUIPMENT																		0	0.00
FY02 EQUIPMENT																		0	0.00
FY03 EQUIPMENT																		0	0.00
TO COMPLETE																		0	0.00
TOTAL INSTALLATION COST																		0.0	2.8
TOTAL PROCUREMENT COST																		2.8	5.8
TOTAL COST																		2.8	8.6
METHOD OF IMPLEMENTATION: AIT																			
CONTRACT DATE: PRIOR YEAR: ADMINISTRATIVE LEADTIME: 6 MONTHS																			
PRODUCTION LEADTIME: 13 MONTHS																			
CURRENT YEAR: 12/94 BUDGET YEAR: 12/95																			
BUDGET YEAR: 5/97 BUDGET YEAR: 12/96																			
BUDGET YEAR: 1/98																			
<u>INSTALLATION SCHEDULE:</u>																			
INPUT =====>		FY 95	FY 96	FY 97	FY 98	FY 99	FY 20	TC											
		1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	TOTAL										
FY 96 & PRIOR				00,00,00,00	00,00,00,00	00,00,00,00	00,00,00,00	00,00,00,00	VAR										
FY 97																			
FY 98		*VAR																	
OUTPUT =====>		FY 95	FY 96	FY 97	FY 98	FY 99	FY 20	TC											
		1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	TOTAL										
		00,00,00,00	00,00,00,00	00,00,00,00	00,00,00,00	00,00,00,00	00,00,00,00	00,00,00,00	VAR										
FY 96 & PRIOR																			
FY 97																			
FY 98		*VAR																	

* NUMEROUS ORDLTS WHICH EFFECT VARIOUS TYPES OF EQUIPMENT.

P-3A

CLASSIFICATION: UNCLASSIFIED

TIME PHASED REQUIREMENTS SCHEDULE (SUPPLEMENT SHEET-INSTALLATION DATA) P-23A												DATE February 1997			
APPROPRIATION/BUDGET ACTIVITY OTHER PROCUREMENT, NAVY BA-4 ENGAGEMENT SUPPORT								P-1 ITEM NOMENCLATURE/PROJECT UNIT ENGAGEMENT SYSTEMS SUPPORT 523600 MK 26 MIDLIFE UPGRADE							
1ST QTR		2ND QTR		3RD QTR		4TH QTR		1ST QTR		2ND QTR		3RD QTR		4TH QTR	
E.I./L	QTY	E.I./L	QTY	E.I./L	QTY	E.I./L	QTY	E.I./L	QTY	E.I./L	QTY	E.I./L	QTY	E.I./L	QTY
FY 96								FY 97							
		DDG 996 CG 48	1 1	DDG 995	2	DDG 994	1			CG 49	1	DDG 993 CG 50	2 2		
FY 98								FY 99							
CG 47 DDG 996	2 1	DDG 994	1			CG 48 CG 49	1 1							CG 51	1

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BUDGET ITEM JUSTIFICATION SHEET							DATE February 1997	
APPROPRIATION/BUDGET ACTIVITY OPN BA 4: ORDNANCE SUPPORT EQUIPMENT					P-1 ITEM NOMENCLATURE NATO SEASPARROW #523700			
	FY 1996	FY 1997	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003
QUANTITY								
COST (In Millions)	\$ 6.5 1]	\$ 4.6	\$ 6.9	\$ 27.3	\$ 55.1	\$ 50.5	\$ 61.1	\$ 62.8
<p><u>NATO SEASPARROW Surface Missile System (NSSMS)</u></p> <p>NATO SEASPARROW is a Self Defense AAW Shipboard Missile System</p> <p>Primary operations consist of:</p> <ul style="list-style-type: none">- Acquiring targets from external or internal designations- Establishing track data for Engageability Determination and Launcher/Missile Control- Target Illumination for Missile Guidance- Missile Firing- Kill/Survive Assessment <p>Provides fully automatic operation with provisions for Operator Intervention or Override from the time of Target Designation to Missile Away.</p> <p>The NSSMS consists of a Fire Control System comprised of: Directors, a General Purpose Digital Computer, Signal Data Convertors, Transmitter Group, Operating Consoles, and an 8 Cell Launcher which employs the surface launch variant of the Sparrow Missile. The Surface Launch Version (RIM-7) Uses a Radar Homing Guidance System, with Target Illumination provided by the shipboard MK91 System Radar Directors.</p> <p>When NSSMS is combined with the MK23 Target Acquisition System (TAS), they become the AN/SWY-1 Self Defense Surface Missile System (SDSMS) for the following U.S. Navy Ships: AOE/AORs, CV/CVNs, DD963s, LHDs, Self Defense Test Ship, and shore based facilities.</p> <p>1] FY 1996 funding is in line #149. This Program P-1 line was separated for the FY97 and outyears from the P-1 Item Nomenclature Point Defense Support equipment (#149).</p>								

EXHIBIT P-40

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BUDGET ITEM JUSTIFICATION SHEET (continuation) (Exhibit P-40 cont.)		DATE February 1997
APPROPRIATION/BUDGET ACTIVITY OPN BA 4: ORDNANCE SUPPORT EQUIPMENT	P-1 ITEM NOMENCLATURE NATO SEASPARROW #523700	
<p>The NSSMS is a NATO Cooperative Project with the participating governments of Australia, Belgium, Canada, Denmark, Germany, Greece, Italy, Norway, The Netherlands, Portugal, Spain, Turkey and the United States. The NSSMS and associated systems of the Cooperative Project were developed, produced and are supported under an International Memorandum of Understanding (MOU).</p> <p>The NATO Cooperative Project is currently in the Engineering, Manufacturing & Development Phase (EMD) for the Evolved SEASPARROW Missile (ESSM) and associated NSSMS/MK91 Fire Control modifications. Production of the system changes to accommodate ESSM are introduced in FY99.</p> <p>The FY98 budget request for NSSMS provides funding for:</p> <p style="padding-left: 40px;">Minor Engineering Changes/Ordnance Alterations (software or hardware) procured in response to the fleet concerns of the combat readiness (including safety and reliability) of the system. End of system production has mandated reuse of systems as well as ensuring systems in the Fleet have required changes for reliability and performance improvements.</p> <p>The ECP/Ordalts procured under this line in FY98 will be installed in NSSMS on AOE/AORs, CV/CVNs, DD 963 and LHD Class ships. Installation will be accomplished in a regular overhaul, restricted availability or Tiger Team. Naval Surface Warfare Center, Port Hueneme Division functions as the In Service Engineering Agent (ISEA) and support agent.</p> <p>FY99 funding introduces the following:</p> <p style="padding-left: 40px;">The MK91 NATOSEASPARROW Guided Missile Fire Control System (GMFCs) Rearchitecture Program which integrates NSSMS into the Ship Self Defense (SSDS) architecture to provide an additional layer of ship missile defense. This effort consists of combining the Firing Officer Console and Radar Set Console functionality into a single Advanced Display System Console (AN/UYQ 70), modifying the Signal Data Processor and redistributing this functionality within SSDS Compatible microprocessors. This modification will allow for full exploitation of the capabilities of the future ESSM, as well as provide reductions in the cost of ownership and manning.</p> <p style="padding-left: 40px;">The MK91/ESSM modification will be installed on CV/CVNs, LHD and LPD class ships.</p> <p style="padding-left: 40px;">The Transmitter/SEAT/SDP upgrade will be installed on all NSSMS ships.</p> <p>Installation of this major upgrade will be done at the shipyards during scheduled availability.</p> <p>The budget reflects the transfer of design services into the appropriate equipment P-1 line item in accordance with full funding policy FY98 and out.</p>		

EXHIBIT P-40

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WEAPON SYSTEM COST ANALYSIS							February 1997		
APPROPRIATION/BUDGET ACTIVITY					P-1 ITEM NOMENCLATURE				
OPN BA4: ORDNANCE SUPPORT EQUIPMENT					NATO SEASPARROW				
ELEMENT OF COST (1)	IDENT CODE (2)	TOTAL COST IN THOUSANDS OF DOLLARS							
		FY96		FY97		FY98		FY99	
		QTY (3)	TOTAL COST (6)	QTY (5)	TOTAL COST (8)	QTY (7)	TOTAL COST (8)	QTY (9)	TOTAL COST (10)
US003 NSSMS IMPROVEMENTS			5,504		3,690		5,693		5,484
US004 ESSM/MK91 SYSTEM MODIFICATION			-		-		-		19,274
US900 NSSMS - CSS			375		312		375		750
US5IN EQUIPMENT INSTALLATION (FMP)			601		612		683		1,539
USDSA DESIGN SERVICES							115		238
	</								

EXHIBIT P-5

UNCLASSIFIED

UNCLASSIFIED

MODIFICATION TITLE:	VARIOUS UPGRADES FOR THE NATO SEASPARROW										
MODELS OF SYSTEM AFFECTED:	NATO SEASPARROW SURFACE MISSILE SYSTEMS (NSSMS)										
DESCRIPTION/JUSTIFICATION:	<p>The NSSMS Ordalt line provides for engineering changes/ordnance alterations (software or hardware) procured in response to fleet concerns. FY00 introduces the transmitter upgrade for other than the MK91 Rearch ships. FY03 introduces the Signal Data Processor (SDP) upgrade.</p> <p>The Solid State transmitter upgrade in FY00 will:</p> <ul style="list-style-type: none"> - Support ESSM upgrade on the Designated Ships - Uses Modular Solid State PA design - Replaces the current Klystron Vacuum Tubes resulting in: <ul style="list-style-type: none"> • Lower Cost of Ownership • Improved reliability • Reduced system downtime • Lower associated maintenance for parts replacement <p>Non-recurring effort associated with the Transmitter upgrade will complete in FY98.</p>										
DEVELOPMENT STATUS/MAJOR:											
DEVELOPMENT MILESTONES:											
		FY96 & PRIOR	FY 97	FY 98	FY 99	FY 00	FY01	FY02	FY03	TC	Total
	Qty	\$	Qty	Qty	Qty	Qty	Qty	Qty	Qty	Qty	Qty
FINANCIAL PLAN (\$ in Millions)											
RDT&E											
PROCUREMENT (VARIOUS)		5.4	3.8	5.7	5.5	7.4	13.5	7.7	31.5	Continuing	Continuing
Kit Quantity											
Installation Kits											
Installation Kits Nonrecurring											
Equipment (Various Ordalts)		5.4	2.0	4.5	5.5	7.4	11.6	6.0	31.5	Continuing	Continuing
Equipment Nonrecurring			1.8	1.2			2.2	1.7			6.9
Engineering Change Orders											
Data											
Training Equipment											
Support Equipment											
Other											
Interim Contractor Support											
Installation of Hardware											
(FY96 & Prior Equipment VARIOUS)		0.6 *	0.6	0.7							
(FY97 Equipment VARIOUS)					0.7						
(FY98 Equipment VARIOUS)						0.5					
(FY99 Equipment VARIOUS)							0.3	0.3	0.6		
(FY00 Equipment VARIOUS)											
(FY01 Equipment VARIOUS)										Continuing	Continuing
(FY02 Equipment VARIOUS)											
(FY03 Equipment VARIOUS)											
Total Installation Cost		0.6	0.6	0.7	0.7	0.5	0.3	0.3	0.6		
Total Procurement Cost		5.4	3.8	5.7	5.5	7.4	13.5	7.7	31.5		
Total Cost		6.0	4.4	6.4	6.2	7.9	13.8	8.0	32.1		

UNCLASSIFIED

METHOD OF IMPLEMENTATION: ** See below ADMINISTRATIVE LEADTIME: 6 MONTHS. PRODUCTION LEADTIME: VARIES 18 TO 24 MONTHS.

CONTRACT DATE: Current Year: VAR Budget Year 1: VAR Budget Year 2: VAR

PRODUCTION DELIVER DATE: Current Year: VAR Budget Year 1: VAR Budget Year 2: VAR

INSTALLATION SCHEDULE:		FY96 & PY				FY97				FY98				FY99				FY00				FY01				FY02				FY03				TO COMPLETE				TOTAL
INPUT =====>		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4					
	FY96 & Prior	13	13	13	12	6	6	5	5	5	5	5	3	4	4	4	3																	106				
	FY97													6	6	6	5	2	2	2	2												31					
	FY98																	4	4	4	4												16					
	FY99																					2	1	1									4					
	FY00																								2	2	3	3					10					
	FY01																											3	4	4	4			15				
	FY02																														3	3	3	9				
	FY03																																					
	TC																																					
OUTPUT =====>		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	TOTAL				
	FY96 & Prior	9	13	13	13	12	6	6	5	5	5	5	5	3	4	4	4	3																115				
	FY97													6	6	6		5	2	2	2	2											31					
	FY98																	4	4	4													16					
	FY99																					2				1	1							4				
	FY00																								2	2			3	3			10					
	FY01																											3			4	4		15				
	FY02																														3	3	3	9				
	FY03																																					
	TC																																					

* Installation is for FY96 & Prior procurements as reflected in P-1 Line No. 163 "POINT DEFENSE SUPPORT EQUIPMENT" (System - NSSMS)

** NOTE: Installation is with Tiger Team or in regular overhaul or restricted availability

SEE ATTACHED SHIP LISTING FOR TRANSMITTER INSTALL

EXHIBIT P-3A

UNCLASSIFIED

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MODIFICATION TITLE:	MK91 REARCHITECTURE/ESSM UPGRADE																					
MODELS OF SYSTEM AFFECTED:	NATO SEASPARROW SURFACE MISSILE SYSTEMS (NSSMS)																					
DESCRIPTION/JUSTIFICATION:	The MK91 NATO Seasparrow Rearchitecture Program will integrate NSSMS into the SSDS architecture to provide an additional layer of ship missile defense. This upgrade will eliminate the analog point to point architecture and other deficiencies resident in the existing MK57 NSSMS as well as allow for full exploitation of the ESSM. Additionally, reductions in NSSMS cost of ownership (fleet) and manning will be realized.																					
DEVELOPMENT STATUS/MAJOR	Ongoing development scheduled for completion in FY 98																					
DEVELOPMENT MILESTONES:																						
		FY96			FY 97		FY 98		FY 99		FY 00		FY01		FY02		FY03		TC		Total	
	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$
FINANCIAL PLAN (\$ in Millions)																						
RDT&E																						
PROCUREMENT (VARIOUS) 1]																						
Kit Quantity - Ship Sets							2		4		4		4		2		16.1		Continuing		16	
Installation Kits																						
Installation Kits Nonrecurring																						
Equipment (Various Ordalts)							15.3		41.4		29.4		39.3		16.1				Continuing		141.5	
Equipment Nonrecurring							4.0		4.2		1.0										9.2	
Engineering Change Orders																						
Data																						
Training Equipment							1		2													
Support Equipment																						
Other																						
Interim Contractor Support																						
Installation of Hardware																						
(FY96 & Prior Equipment VARIOUS)																						
(FY97 Equipment VARIOUS)																						
(FY98 Equipment VARIOUS)																						
(FY99 Equipment VARIOUS)							0.9		0.6		2	3.7									5.2	
(FY00 Equipment VARIOUS)												0.8	4	8.4							9.2	
(FY01 Equipment VARIOUS)														1.2	4	9.5					10.7	
(FY02 Equipment VARIOUS)																0.7			Continuing		0.7	
(FY03 Equipment VARIOUS)																						
Total Installation Cost 2]	0.0		0.0		0.0		0.9		0.6		4.5		9.6		10.2						25.8	
Total Procurement Cost	0.0		0.0		0.0		19.3		45.6		30.4		39.3		16.1						150.7	
Total Cost	0.0		0.0		0.0		20.2		46.2		34.9		48.9		26.3						176.5	

NOTE: 1] Procurement cost varies by year dependant on ships (CV/CVNs have 2 dual systems, while a LHD has 2 singles, etc.)

NOTE: 2] FY99 and FY00 funding provides preplanning for the LHD-1 and the CVN-65. Shipyard defines cost for this effort. LHD-1 is the lead ship and as such, costs will be higher than follow on LHD ships. See attached P-23A exhibits for ship hull installation. The install cost do not include design.

UNCLASSIFIED

METHOD OF IMPLEMENTATION: ** See below ADMINISTRATIVE LEADTIME: 6 MONTHS. PRODUCTION LEADTIME: 18 months.

CONTRACT DATE: 1/ January 1999

PRODUCTION DELIVER DATE: 1/ 18 months after contract award

INSTALLATION SCHEDULE:

INPUT =====>

FY99
FY00
FY01
FY02
FY03
TC

FY00
1 2 3 4

FY01
1 2 3 4
1 1

FY02
1 2 3 4
1 2 1

FY03
1 2 3 4
1 2 1

FY04
1 2 3 4
2 2

TO
COMPLETE
1 2 3 4
2

TOTAL
2
4
4
4
2

OUTPUT =====>

FY99
FY00
FY01
FY02
FY03
TC

FY00
1 2 3 4

FY01
1 2 3 4
1

FY02
1 2 3 4
1 3

FY03
1 2 3 4
1 1

FY04
1 2 3 4
2 1

TO
COMPLETE
1 2 3 4
4
2

TOTAL
2
4
4
4
2

1/ Contract award in January 1999 will include options to be exercised no later than 31 December each FY for follow on procurements.

Note: See attached P-23A for specific MK91 Rearch/ESSM install plan by ship

EXHIBIT P-3A

UNCLASSIFIED

TIME PHASED REQUIREMENTS SCHEDULE (SUPPLEMENT SHEET-INSTALLATION DATA) P-23A												DATE February 1997			
APPROPRIATION/BUDGET ACTIVITY								P-1 ITEM NOMENCLATURE/PROJECT UNIT							
OPN BA 4: ORDNANCE SUPPORT EQUIPMENT								NATO SEASPARROW							
1ST QTR		2ND QTR		3RD QTR		4TH QTR		1ST QTR		2ND QTR		3RD QTR		4TH QTR	
E.I./L	QTY	E.I./L	QTY	E.I./L	QTY	E.I./L	QTY	E.I./L	QTY	E.I./L	QTY	E.I./L	QTY	E.I./L	QTY
FY 1999								FY 2000							
O P N															
					CVN-68	1		CVN-76	1						
S C N															
FY 2001								FY 2002							
LHD-1	1					CVN-65	1	SWEF	1	WALLOPs	1	LHD-5	1		
O TRAINER	1							LHD-4	1	ISLAND	1				
P DAMNECK										CVN-70	1				
N										CV-67	1				
S C N															

DD Form 2447S, JUN 86

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UNCLASSIFIED

* Increase in population of systems and the USS SARATOGA incident requires accommodation for training of personnel, system from decommissioned assets.

* Installation is for the MK91 Rearch/ESSM Upgrade on existing NSSMS systems.
* Installation (including transmitter) will be done at shipyard during scheduled availability.

UNCLASSIFIED

TIME PHASED REQUIREMENTS SCHEDULE (SUPPLEMENT SHEET-INSTALLATION DATA) P-23A										DATE February 1997					
APPROPRIATION/BUDGET ACTIVITY								P-1 ITEM NOMENCLATURE/PROJECT UNIT							
OPN BA 4: ORDNANCE SUPPORT EQUIPMENT								NATO SEASPARROW MK REARCH/ESSM UPGRADE INSTALL							
1ST QTR		2ND QTR		3RD QTR		4TH QTR		1ST QTR		2ND QTR		3RD QTR		4TH QTR	
E.I./L	QTY	E.I./L	QTY	E.I./L	QTY	E.I./L	QTY	E.I./L	QTY	E.I./L	QTY	E.I./L	QTY	E.I./L	QTY
FY 2003								FY 2004							
P N		CVN-72	1	LHD-2 CVN-75	1 1	CVN-74	1					LHD-6 CVN-71	1 1	CVN-73 LHD-7	1 1
		CVN-69	1												
FY 2005															
O P N		LPD-17	1	LPD-18	1										
S C N															

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UNCLASSIFIED

* Increase in population of systems and the USS SARATOGA incident requires accommodation for training of personnel, system from decommissioned assets.

* Installation is for the MK91 Rearch/ESSM Upgrade on existing NSSMS systems.
* Installation (including transmitter) will be done at shipyard during scheduled availability.

UNCLASSIFIED
CLASSIFICATION

BUDGET ITEM JUSTIFICATION SHEET					FEBRUARY 1997			
APPROPRIATION/BUDGET ACTIVITY					P-1 ITEM NOMENCLATURE			
OTHER PROCUREMENT, NAVY/4 ORDNANCE SUPPORT EQUIPMENT					ROLLING AIRFRAME MISSILE (RAM) 5238			
	FY96	FY97	FY98	FY99	FY00	FY01	FY02	FY03
QUANTITY								
COST (IN MILLIONS \$)	44.5	44.5	68.3	61.2	27.9	10.3	44.0	45.3
<p>Rolling Airframe Missile (RAM) (MK-49 Guided Missile Launching System (GMLS))</p> <p>RAM is a NATO cooperative project with Germany. The RAM production MOU, approved by the U.S. and Germany on 3 August 1987, requires coproduction of the RAM Guided Missile Launching System. In August 1992, General Dynamics(ADSD) was acquired by Hughes Aircraft Company.</p> <p>The RAM is a lightweight, quick-reaction, high firepower missile system designed to provide antiship missile defense. The MK-31 Guided Missile Weapons System (GMWS) is comprised of a MK-44 Guided Missile Round Pack (GMRP) and the MK-49 GMLS, which holds 21 RAM missiles. The 21-round launcher is compatible with various platforms ranging from large USN amphibious assault ships to S-143 type German patrol boats. This system is designed to counter high density anti-ship, cruise missile raids and provide for ship survivability with accurate terminal guidance, proven lethality and no fire control channel dependence.</p> <p>Full-Scale Engineering Development (FSED) began in 1979. Milestone IIIA Approval for Limited Production (ALP) was granted 27 April 1987, and operational tests were completed in April 1990. Approval for Full Rate Production was granted 6 May 1993. The total RAM Guided Missile Launching System (GMLS) procurement program is 146 launchers (82 OPN (including one trainer), 21 SCN, and 43 German systems). 91 Launchers (41 U.S. OPN, 7 U.S. SCN and 43 German) were procured in FY 1997 and prior years under joint US/German production contracts. Of the 55 remaining launchers, 28 OPN and 12 SCN launchers are budgeted in the years FY98 through FY03. The total program cost for the remaining OPN launchers is \$410.1 million. 13 OPN and 2 SCN units are planned beyond the FYDP.</p>								
DD Form 2454, JUN 86					P-1 SHOPPING LIST		Exhibit P-40	
					ITEM NO.		PAGE NO.	
					153		1	

UNCLASSIFIED
CLASSIFICATION

BUDGET ITEM JUSTIFICATION SHEET		FEBRUARY 1997																						
(Exhibit P-40 cont.)																								
APPROPRIATION/BUDGET ACTIVITY		P-1 ITEM NOMENCLATURE																						
OTHER PROCUREMENT, NAVY/4 ORDNANCE SUPPORT EQUIPMENT		ROLLING AIRFRAME MISSILE (RAM) 5238																						
<p>RAM is installed on or planned for installation on the following ship classes:</p> <table><thead><tr><th>Class</th><th>Ships</th></tr></thead><tbody><tr><td>LHA (OPN)</td><td>5</td></tr><tr><td>LSD (OPN)</td><td>11</td></tr><tr><td>LSD (SCN)</td><td>1</td></tr><tr><td>DD 963 (OPN)</td><td>24</td></tr><tr><td>LHD (OPN)</td><td>4</td></tr><tr><td>LHD (SCN)</td><td>3</td></tr><tr><td>CVN (OPN)</td><td>8</td></tr><tr><td>CVN (SCN)</td><td>4</td></tr><tr><td>LPD 17 (SCN)</td><td>3</td></tr><tr><td>TRAINER (OPN)</td><td>1</td></tr></tbody></table> <p>The RAM GMLS installations are performed during overhauls or regular shipyard availability. The NSWC Port Hueneme provides installation oversight support as the ISEA for the RAM system. RAM will be installed on LHA, LSD, LHD, DD963, CVN, and LPD ship classes.</p> <p>The budget reflects the transfer of design services into the appropriate equipment P-1 line item in accordance with full funding policy FY98 and out.</p>			Class	Ships	LHA (OPN)	5	LSD (OPN)	11	LSD (SCN)	1	DD 963 (OPN)	24	LHD (OPN)	4	LHD (SCN)	3	CVN (OPN)	8	CVN (SCN)	4	LPD 17 (SCN)	3	TRAINER (OPN)	1
Class	Ships																							
LHA (OPN)	5																							
LSD (OPN)	11																							
LSD (SCN)	1																							
DD 963 (OPN)	24																							
LHD (OPN)	4																							
LHD (SCN)	3																							
CVN (OPN)	8																							
CVN (SCN)	4																							
LPD 17 (SCN)	3																							
TRAINER (OPN)	1																							
DD Form 2454, JUN 86	<table><thead><tr><th colspan="2">P-1 SHOPPING LIST</th></tr><tr><th>ITEM NO.</th><th>PAGE NO.</th></tr></thead><tbody><tr><td>153</td><td>2</td></tr></tbody></table>	P-1 SHOPPING LIST		ITEM NO.	PAGE NO.	153	2	Exhibit P-40																
P-1 SHOPPING LIST																								
ITEM NO.	PAGE NO.																							
153	2																							

UNCLASSIFIED

WEAPON SYSTEM COST ANALYSIS						FEBRUARY 1997			
OPN BA 4: ORDNANCE SUPPORT EQUIPMENT				C. P-1 ITEM NOMENCLATURE					
				ROLLING AIRFRAME MISSILE (RAM) - 5238					
ELEMENT OF COST (1)	IDENT CODE (2)	TOTAL COST IN THOUSANDS OF DOLLARS							
		FY 96		FY 97		FY 98		FY 99	
		QTY (5)	TOTAL COST (6)	QTY (7)	TOTAL COST (8)	QTY (9)	TOTAL COST (10)	QTY (9)	TOTAL COST (10)
UR006 RAM GUIDED MISSILE LAUNCHING SYSTEM	A	6	27,262	5	23,498	9	42,300	7	35,313
UR006 RAM ECPs	A		341		5,510		3,255		3,214
UR006 RAM GMLS ORDALTS	A	2	1,440		0	6	5,130	6	5,280
UR777 RAM ENGR SERVICES (CONTRACTOR)	A		1,013		2,288		3,708		3,854
UR007 RAM GMLS PRODUCTION SPT	A		3,247		3,113		4,367	*	4,488
UR900 RAM - CSS	A		834		413		918	*	998
UR006 RAM GMLS ORDALT INSTALL (NON FMP)	A		0		0		149		450
UR5IN EQUIPMENT INSTALLATION (FMP)	A		10,326		9,651		7,366		6,631
URDSA DESIGN AGENT	A		0		0		1,099		946
TOTAL			44,463		44,473		68,292		61,174
* No German contribution to the joint GMLS program									

UNCLASSIFIED

BUDGET PROCUREMENT HISTORY & PLANNING EXHIBIT (P-5A)										FEBRUARY 1997
B. APPROPRIATION/BUDGET ACTIVITY OTHER PROCUREMENT, NAVY / 4 ORDNANCE SUPPORT EQUIPMENT					C. P-1 ITEM NOMENCLATURE ROLLING AIRFRAME MISSILE (RAM) - 5238					
LINE ITEM/FISCAL YEAR	CONTRACTOR	CONTRACT METHOD & TYPE	CONTRACTED BY	AWARD DATE	DATE OF FIRST DELIVERY	QTY	UNIT COST	SPECS AVAIL NOW ?	SPEC REV REQ'D ?	IF YES, WHEN AVAIL
RAM UR006										
FY96 (RAM GMLS)	Hughes Missile Systems Tucson, Arizona	SS/FP	NAVSEA	02/96	11/97	6	*4544	YES	NO	
FY97 (RAM GMLS)	Hughes Missile Systems Tucson, Arizona	OPTION	NAVSEA	11/96	8/98	5	4700	YES	NO	
FY98 (RAM GMLS)	Hughes Missile Systems Tucson, Arizona	SS/FP	NAVSEA	12/97	9/99	9	4700	YES	NO	
FY99 (RAM GMLS)	Hughes Missile Systems Tucson, Arizona	OPTION	NAVSEA	12/98	9/00	7	5045	YES	NO	
* The unit price of FY96 was based on a quantity of eight (6 OPN and 2 SCN)										

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Exhibit P-5a

UNCLASSIFIED

MODIFICATION TITLE:

MODELS OF SYSTEM AFFECTING ROLLING AIRFRAME MISSILE - ORDALTS

DESCRIPTION/JUSTIFICATION: The Rolling Airframe Missile is a lightweight, quick-reaction, high firepower missile system designed to provide antiship missile defense. The system (MK-31 GMWS), comprises an MK-44 Guided Missile Round Pack (GMRP) and the MK-49 Guided Missile Launching System (GMLS), which holds 21 RAM missiles. The 21-round launcher is compatible with various platforms, ranging from large USN amphibious assault ships to S-143-type German patrol boats. This system is designed to counter high density anti-ship, cruise missile raids and provide for ship survivability with accurate terminal guidance, proven lethality and no fire control channel dependence. This ordalt enables the GMLS to launch either the Block 0 or the Block 1 IRMU Missile.

DEVELOPMENT STATUS/MAJIF: Full-Scale Engineering Development (FSED) began in 1979. Milestone IIIA Approval for Limited Production (ALP) was granted 27 April 1987 and Operational Tests were DEVELOPMENT MILESTONES completed in April 1990. Approval for Rate Production was granted 6 May 1993.

	FY96		FY97		FY98		FY99		FY00		FY01		FY02		FY03		TC		Total	
	-----		-----		-----		-----		-----		-----		-----		-----		-----		-----	
	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$
FINANCIAL PLAN (\$ in Millions)																				
RDT&E																				
PROCUREMENT																				
Kit Quantity																				
Installation Kits																				
Installation Kit Nonrecurring																				
Equipment																				
Equipment Nonrecurring																				
Equipment Ordalts	2	1.4			6	5.1	6	5.3	6	4.5	0	0.0	4	3.2	5	4.3	20	12.8	49	36.60
Unit Cost		0.7				0.9		0.9		0.8		0.0		0.0		0.0		0.6		0.75
Engineering Change Orders																				
Training Equipment																				
Support Equipment																				
Other																				
Interim Contractor Support																				
Installation of Hardware																				
(FY96 & Prior Equipment)					2	0.15													2	0.15
(FY97 Equipment)																			0	0.00
(FY98 Equipment)							6	0.45											6	0.45
(FY99 Equipment)									6	0.45									6	0.45
(FY00 Equipment)											6	0.45							6	0.45
(FY01 Equipment)													0	0.00					0	0.00
(FY02 Equipment)															4	0.30			4	0.30
(FY03 Equipment)																	5	0.38	5	0.38
To Complete																	20	1.50	20	1.50
Total Installation Cost *	0	0.0	0	0.00	2	0.15	6	0.45	6	0.45	6	0.45	0	0.00	4	0.30	25	1.88	49	3.675
Total Procurement Cost		1.4		0.0		5.10		5.30		4.50		0.00		3.20		4.30		12.80		36.60
Total Cost		1.4		0.0		5.25		5.75		4.95		0.45		3.20		4.60		14.68		40.28

* RAM Launcher Ordalt installations do not require FMP installation funding as they can be installed at the Organizational or Intermediate level in two days and require no industrial availability. The inventory objective for this items is:

METHOD OF IMPLEMENTATION: ORG/INTERME ADMINISTRATIVE LEADTIME: 3 MONTHS PRODUCTION LEADTIME: 12-18 MONTHS

CONTRACT DATE: Prior Year: Apr 96 Current Year: Apr 97 Budget Year 1: Dec 97 Budget Year 2: Dec 97

PRODUCTION DELIVERY DATE: Prior Year: Oct 97 Current Year: Oct 98 Budget Year 1: Jun 99 Budget Year 2: Jun 00

INSTALLATION SCHEDULE:

INPUT	FY96 & Prior				FY97				FY98				FY99				FY00				FY01				FY02				FY03				Complete				Total
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4					
FY 96 & PRIOR									00,00,00,02																								2				
FY 97																																	0				
FY 98												00,00,00,06																					6				
FY 99													00,00,00,06																				6				
FY 00														00,00,00,06																			6				
FY 01															00,00,00,06																		0				
FY 02																	00,00,00,00																4				
FY 03																										00,00,00,04							5				
To Complete																															00,00,00,20			20			
Total																																	49				

OUTPUT	FY96 & Prior				FY97				FY98				FY99				FY00				FY01				FY02				FY03				To Complete				Total
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4					
FY 96 & PRIOR									00,00,00,02																								2				
FY 97																																	0				
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FY 99													00,00,00,06																				6				
FY 00														00,00,00,06																			6				
FY 01															00,00,00,06																		0				
FY 02																	00,00,00,00																4				
FY 03																										00,00,00,04							5				
To Complete																															00,00,00,20			20			
Total																																	49				

P-1 SHOPPING LIST

EXHIBIT P-3A

MODIFICATION TITLE:

MODELS OF SYSTEM AFFECTROLLING AIRFRAME MISSILE [RAM]

DESCRIPTION/JUSTIFICATION The Rolling Airframe Missile is a lightweight, quick-reaction, high firepower missile system designed to provide antiship missile defense. The system (MK-31 GMWS), comprises an MK-44 Guided Missile Round Pack (GMRP) and the MK-49 Guided Missile Launching System (GMLS), which holds 21 RAM missiles. The 21-round launcher is compatible with various platforms, ranging from large USN amphibious assault ships to S-143-type German patrol boats. This system is designed to counter high density anti-ship, cruise missile raids and provide for ship survivability with accurate terminal guidance, proven lethality and no fire control channel dependence.

DEVELOPMENT STATUS/MAJ Full-Scale Engineering Development (FSED) began in 1979. Milestone IIIA Approval for Limited Production (ALP) was granted 27 April 1987 and Operational Tests were DEVELOPMENT MILESTONES completed in April 1990. Approval for Rate Production was granted 6 May 1993.

	FY96 & Prior		FY97		FY98		FY99		FY00		FY01		FY02		FY03		TC		Total	
	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$
FINANCIAL PLAN (\$ in Millions)																				
RDT&E																				
PROCUREMENT	36	219.6	5	34.8	9	54.6	7	47.8	0	8.7	0	0.0	6	40.3	6	40.1	13	100.9	82	530.9
Kit Quantity																				
Installation Kits																				
Installation Kit Nonrecurring																				
Equipment	36	181.7	5	23.5	9	42.3	7	35.3	0	0.0	0	0.0	6	31.8	6	32.4	13	80.6	82	427.6
Unit Cost		5.0		4.7		4.7		5.0		0.0		0.0		5.3		5.4		6.2		5.2
Engineering Services (Contractor)		6.3		2.3		3.7		3.8		1.9		0.0		2.4		2.0		4.4		26.8
Equipment ORDALTS																				
Engineering Change Orders		8.9		5.5		3.3		3.2		1.2		0.0		1.0		1.0		0	0.0	24.1
Training Equipment																				
Support Equipment																				
Other (Prod Supp)		18.9		3.1		4.4		4.5		4.6		0.0		4.1		3.7		13.8		43.3
Interim Contractor Support		3.8		0.4		0.9		1.0		1.0		0.0		1.0		1.0		2.1		9.1
Installation of Hardware																				
FY96 & Prior Equipment	19	19.7	10	9.7	7	8.5													36	37.9
FY97 Equipment							5	7.6											5	7.6
FY98 Equipment									9	14.3									9	14.3
FY99 Equipment											7	9.8							7	9.8
FY00 Equipment													0	0.5					0	0.5
FY01 Equipment															0	0.6			0	0.6
FY02 Equipment																	6	9.0	6	9.0
FY03 Equipment																	6	9.0	6	9.0
To Complete																	13	19.5	13	19.5
Total Installation Cost	19	19.7	10	9.7	7	8.5	5	7.6	9	14.3	7	9.8	0	0.5	0	0.6	25	37.5	82	108.2
Total Procurement Cost	219.6	34.8	54.6	47.8	8.7	0.1	40.3	40.1	100.9	530.9										
Total Cost	239.3	44.5	63.1	55.4	23.0	9.9	40.8	40.7	138.4	639.1										

METHOD OF IMPLEMENTATION: SHIPYAFADMINISTRATIVE LEADTIME: 7 MONTHS

PRODUCTION LEADTIME: 21 MONTHS

The inventory objective for this item is: 82

CONTRACT DATE: Prior Year: Feb 96 Current Year: Nov 96

Budget Year 1: Dec 97

Budget Year 2: Dec 98

PRODUCTION DELIVERY DAT Prior Year: Nov 97 Current Year: Aug 98

Budget Year 1: Sep 99

Budget Year 2: Sep 00

INSTALLATION SCHEDULE:

INPUT =====>

FY 96 & PRIOR	11,02,05,01	01,02,06,01	03,02,02,00																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																
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EXHIBIT P-3A

TIME PHASED REQUIREMENTS SCHEDULE	A. APPROPRIATION/BUDGET OTHER PROCUREMENT, NAVY / 4 ORD SUPPT EQUIP								B. P-1 ITEM NOMENCLATURE ROLLING AIRFRAME MISSILE (RAM) 5238								FEBRUARY 1997			
	FY 96				FY 97				FY 98				FY 99							
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4				
ACTIVE FORCE INVEN. (OPN) (81)		2	5	1	1	2	6	1	3		2	2	1	1	3					
ACTIVE FORCE INVEN. (SCN) (21)		2									2		1							
SCHOOLS/OTHER TRAINING (OPN) (1)	1																			
OTHER (GERMANY) (43)	3	3	2			2	2													
TOTAL PHASED REQUIREMENTS (146)	47	54	61	62	63	67	75	76	79	79	83	85	87	88	91	91				
ASSETS ON HAND (14)																				
DELIVERY FY96 AND PRIOR (OPN) (21)																				
DELIVERY FY96 AND PRIOR (GE) (39)																				
DELIVERY FY96 AND PRIOR (SCN) (4)																				
FY95 (GE) (4)						2	2													
FY95 (US OPN) (9)						2	6		1											
FY96 (US OPN) (6)		S							2		2	2								
FY96 (US SCN) (2)		S									2									
FY97 (US OPN) (5)					S								1	1	3					
FY97 (US SCN) (1)					S								1							
FY98 (US OPN) (9)									S											
FY98 (US SCN) (6)									S											
FY99 (US OPN) (7)													S							
FY01 (US OPN) (0)													S							
FY02 (US OPN) (6)																				
FY02 (US SCN) (6)																				
FY03 (US OPN) (6)																				
Beyond FYDP (US OPN) (13)																				
Beyond FYDP (US SCN) (2)																				
TOTAL ASSETS (146)	64	64	64	64	64	68	76	76	79	79	83	85	87	88	91	91				
QUANTITY OVER (+) OR SHORT (-)	17	10	3	2	1	1	1	0	0	0	0	0	0	0	0	0				
D. REMARKS:	E. RQMT (QTY)				TOTAL REQUIREMEN		INSTALLED		ON HAND		FY98 & PRIOR UNDEL		FY99 & OUT UNFUNDED							
	1. APPN.- OPN				#		#		4		28		32							
	2. APPN.- SCN				#		2		2		9		8							
	3. APPN. - GERMAN				#		#		8		4		0							
	4. PROC LEAD TIME				ADMIN: 7		INITIAL ORDER		21		REORDER		21							

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TIME PHASED REQUIREMENTS SCHEDULE	A. APPROPRIATION/BUDGET OTHER PROCUREMENT, NAVY / 4 ORD SUPPT EQUIP								B. P-1 ITEM NOMENCLATURE ROLLING AIRFRAME MISSILE (RAM) 5238				FEBRUARY 1997			
	FY 00				FY 01				FY 02				FY 03			
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
ACTIVE FORCE INVEN. (OPN) (81)		6	2	1	1	6										
ACTIVE FORCE INVEN. (SCN) (21)	2		2	2												
SCHOOLS/OTHER TRAINING (OPN) (1)																
OTHER (GERMANY) (43)																
TOTAL PHASED REQUIREMENTS (146)	93	99	103	106	107	113	113	113	113	113	113	113	113	113	113	113
ASSETS ON HAND (14)																
DELIVERY FY96 AND PRIOR (OPN) (21)																
DELIVERY FY96 AND PRIOR (GE) (39)																
DELIVERY FY96 AND PRIOR (SCN) (4)																
FY95 (GE) (4)																
FY95 (US OPN) (9)																
FY96 (US OPN) (6)																
FY96 (US SCN) (2)																
FY97 (US OPN) (5)																
FY97 (US SCN) (1)																
FY98 (US OPN) (9)		6	2	1												
FY98 (US SCN) (6)	2		2	2												
FY99 (US OPN) (7)					1	6										
FY01 (US OPN) (0)					S											
FY02 (US OPN) (6)									S							
FY02 (US SCN) (6)									S							
FY03 (US OPN) (6)													S			
Beyond FYDP (US OPN) (13)																
Beyond FYDP (US SCN) (2)																
TOTAL ASSETS (146)	93	99	103	106	107	113	113	113	113	113	113	113	113	113	113	113
QUANTITY OVER (+) OR SHORT (-)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
D. REMARKS:	E. RQMT (QTY)				TOTAL REQUIREMEN		INSTALLED		ON HAND		FY98 & PRIOR UNDEL		FY99 & OUT UNFUNDED			
	1. APPN.- OPN				#		#		4		28		32			
	2. APPN.- SCN				#		4		0		9		8			
	3. APPN.- GERMAN				#		#		8		4		0			
	4. PROC LEAD TIME				ADMIN: 7		INITIAL ORDER		21		REORDER		21			

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FEBRUARY 1997

APPROPRIATION/BUDGET ACTIVITY OTHER PROCUREMENT, NAVY / 4 ORDNANCE SUPPORT EQUIPMENT								P-1 ITEM NOMENCLATURE							
1 st QTR		2 nd QTR		3 rd QTR		4 th QTR		1 st QTR		2 nd QTR		3 rd QTR		4 th QTR	
E.I./L.	QTY	E.I./L.	QTY	E.I./L.	QTY	E.I./L.	QTY	E.I./L.	QTY	E.I./L.	QTY	E.I./L.	QTY	E.I./L.	QTY
FY 96								FY 97							
TRAINER	1	LHD 3	2	LHD 1	2	DD 972	1	DD 973	1	LSD 44	2	LHD 2	2	DD 997	1
		LHD 6 (SCN)	2	LSD 48	2							LSD 42	2		
				DD 987	1							LSD 49	2		
FY 98								FY 99							
DD 982	1			LSD 45	2	LSD 51	2	DD 977	1	DD 989	1	DD 978	1		
LHD 4	2			LHD 7 (SCN)	2			LSD 52 (SCN)	1			LSD 46	2		

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FEBRUARY 1997

APPROPRIATION/BUDGET ACTIVITY								P-1 ITEM NOMENCLATURE							
OTHER PROCUREMENT, NAVY / 4								RAM GMLS 5238							
1 st QTR		2 nd QTR		3 rd QTR		4 th QTR		1 st QTR		2 nd QTR		3 rd QTR		4 th QTR	
E.I./L.	QTY	E.I./L.	QTY	E.I./L.	QTY	E.I./L.	QTY	E.I./L.	QTY	E.I./L.	QTY	E.I./L.	QTY	E.I./L.	QTY
FY 00								FY 01							
CVN 68 (SCN)	2	LSD 50	2	LSD 41	2	DD 967	1	DD 985	1	LSD 43	2				
		CVN 70	2	LPD 17 (SCN)	2	CVN 76 (SCN)	2			LSD 47	2				
		CVN 71	2							DD 992	1				
										DD 988	1				
FY 02								FY 03							

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CLASSIFICATION: **UNCLASSIFIED**

BUDGET ITEM JUSTIFICATION SHEET P-40					DATE: FEBRUARY 1997			
APPROPRIATION/BUDGET ACTIVITY OTHER PROCUREMENT, NAVY/4 ORDNANCE SUPPORT EQUIPMENT					P-1 ITEM NOMENCLATURE SHIP SELF DEFENSE SYSTEM (SSDS) MK 1 BLI: 5239 SUBHEAD: 14UQ			
	1996	1997	1998	1999	2000	2001	2002	2003
QUANTITY								
COST (In Millions)	\$15.3	\$19.2	\$5.8	\$22.7	\$59.7	\$65.8	\$67.5	\$65.9
<p>SHIP SELF DEFENSE SYSTEM (SSDS) - Funds are requested to procure an evolutionary Ship Self Defense System (SSDS) for non-AEGIS ships. The Ship Self Defense System is a coordinated engineering approach to improve ship self defense utilizing existing and planned defensive systems in Navy ships. The program coordinates the efforts of diverse acquisition programs that are in varying stages of programmatic maturity, most of which have products already in the fleet. A two phase evolutionary acquisition program structure defined in the AN/SYQ-17 Rapid Anti-Ship Missile Integrated Defense System Operational Requirement 240-03-89 identifies the rapid delivery of an automated anti-ship missile defense tactical decision aid for surface combatants, SSDS MK 0 , followed by an evolutionary program to integrate sensors and automate engagement sequences of hardkill and softkill systems. The latter phase is identified as SSDS MK 1.</p> <p>SSDS MK 0 - Rapid Anti-Ship Missile Integrated Defense System (RAIDS) using ruggedized personal computer workstations and an ETHERNET LAN, it provides decision support to weapons systems operators and managers using data from AN/SLQ-32 and CIWS radar. The MK 0 is designated for use on 25 DD 963 Class and FFG 7 Class. The DD 963 systems were budgeted in FY 93 funding for AN/SLQ-32. A DD 963 MK 0 contract was awarded 12 May 1994. The FY 94 Point Defense budget procured MK 0 systems for sixteen FFG 7 Class ships. The FFG 7 SSDS MK 0 contract awarded 7/95. There are no procurements planned after FY 94. The installation agent for the SSDS MK 0 is NSWC Port Hueneme with installations planned via Alteration Installation Team (AIT). Sixteen installations are scheduled for FY 97.</p> <p>SSDS MK 1 - The Ship Self Defense System MK 1 implements the second phase of an evolutionary acquisition of improved ship self defense capabilities against anti-ship cruise missiles for selected non-AEGIS ships by integrating existing and programmed anti-air warfare stand-alone systems and thereby providing an automated quick reaction and multi-target engagement capability emphasizing performance in the littoral environment. Integration will focus on coordinating existing sensor information, providing threat identification and evaluation, assessing defensive readiness, and recommending an optimized defensive tactical response to counter single and multiple anti-ship cruise missile attacks. Subsequent modifications will require replacement of commercial-off-the-shelf (COTS) equipment and optimize the Ship Self Defense System, providing enhanced self defense capabilities while allowing for insertion of advanced technologies during Engineering and Manufacturing Development and Production Deployment Phases. System design emphasizes use of non-developmental items and commercial standards. Development testing started May 1996 with operational testing to follow in March 1997. Hughes Aircraft Co., San Diego CA, is the system design agent. Prior, current and budget year RDT&E funding for Hughes are \$27,385K, \$12,766K, and \$13,443K, respectively. JHU/APL, Laurel MD, is the technical design agent. Prior, current, and budget year RDT&E funding for JHU/APL are \$6,298K, \$1,824K, and \$1,693K, respectively. SSDS MK 1 is planned for installation on LSD 41-52, LHD 1-7, LHA 1-5, LPD 17- 28 and CV/N 63, 65, 67-76. The installation agent for SSDS MK 1 is NSWC Port Hueneme with installations planned via AIT.</p>								

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BUDGET ITEM JUSTIFICATION SHEET P-40		DATE: FEBRUARY 1997
APPROPRIATION/BUDGET ACTIVITY OTHER PROCUREMENT, NAVY/4 ORDNANCE SUPPORT EQUIPMENT	P-1 ITEM NOMENCLATURE SHIP SELF DEFENSE SYSTEM (SSDS) MK 1 BLI: 5239 SUBHEAD: 14UQ	
<p>Three units were procured in FY 96 with installation in FY 97. Remaining installations will start FY 98 and end FY 04. Shore based units are scheduled for installation at the In-Service Engineering Agent, NSWC Port Hueneme Division in FY 00; the Software Support Agent, NSWC Dahlgren Division in FY 01; and Training Units at FCTCPAC in FY 01. The budget reflects the transfer of design services into the appropriate equipmentP-1 line item in accordance with full funding policy FY98 and out.</p>		

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WEAPON SYSTEM COST ANALYSIS Exhibit P-5									DATE: FEBRUARY 1997	
APPROPRIATION/BUDGET ACTIVITY				P-1 ITEM NOMENCLATURE/SUBHEAD SHIP SELF DEFENSE SYSTEM (SSDS) MK 1						
OTHER PROCUREMENT, NAVY/4 ORDNANCE SUPPORT EQUIPMENT				BLI: 5239 SUBHEAD: 14UQ						
COST CODE	ELEMENT OF COST	IDENT CODE	TOTAL COST IN THOUSANDS OF DOLLARS							
			FY 1996		FY 1997		FY 1998		FY 1999	
			QTY	TOTAL COST	QTY	TOTAL COST	QTY	TOTAL COST	QTY	TOTAL COST
UQ001	SSDS MK 1	B	3	11,304	0	0	0	0	5	14,859
UQ002	SSDS PRODUCTION SUPPORT			3,578		7,255		0		3,299
UQ003	SSDS ECP			0		0		0		1,992
UQ004	SSDS TRAINING			0		2,113		0		1,361
UQ005	SSDS COTS REPLACEMENT			0		0		0		0
UQ009	SSDS - CSS			405		198		0		543
UQ355	SSDS MK 1 EQUIPMENT INSTALL (FMP)			21		8,195		1,802		619
UQ6IN	EQUIPMENT INSTALL (NON-FMP)			0		1,478		3,684		0
UQDSA	DESIGN AGENT			0		0		357		0
	TOTAL			15,308		19,239		5,843		22,673

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CLASSIFICATION: **UNCLASSIFIED**

CLASSIFICATION:

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BUDGET PROCUREMENT HISTORY AND PLANNING EXHIBIT P-5A										DATE FEBRUARY 1997	
APPROPRIATION/BUDGET ACTIVITY OTHER PROCUREMENT, NAVY/4 ORDNANCE SUPPORT EQUIPMENT					P-1 ITEM NOMENCLATURE SHIP SELF DEFENSE SYSTEM (SSDS) MK 1 BLI: 5239					SUBHEAD 14UQ	
COST CODE	LINE ITEM/ FISCAL YEAR	CONTRACTOR AND LOCATION	CONTRACT METHOD & TYPE	CONTRACTED BY	AWARD DATE	DATE OF FIRST DELIVERY	QUANTITY	UNIT COST (000)	SPECS AVAILABLE NOW	SPEC REV REQ'D	IF YES WHEN AVAILABLE
UQ001	FY 96 SSDS MK 1 LSD	HUGHES 3970 Sherman St San Diego CA 92110	FFP	NAVSEA	9/96	3/97	3	2,797	YES	NO	N/A
UQ001	FY 99 SSDS MK 1 LSD LHD	HUGHES 3970 Sherman St San Diego CA 92110	FFP FFP	NAVSEA NAVSEA	1/99 1/99	11/99 11/99	3 1	3,181 3,616	YES YES	NO NO	N/A N/A
REMARKS Unit Cost is dependent on ship class configuration and will vary. FY 96 LSD deliveries require 6 months lead time due to System Design Agent's (Hughes) commitment to meet the Navy's scheduled Shipalts.											

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CLASSIFICATION:

UNCLASSIFIED

MODIFICATION TITLE:
MODELS OF SYSTEM AFFECTED:
DESCRIPTION/JUSTIFICATION:

POINT DEFENSE SYSTEM
SHIP SELF DEFENSE SYSTEM (SSDS) MK 0
Provides decision support to weapons systems operators and managers, using data from AN/SLQ-32 and CIWS radars. Employs ruggedized personal computer based workstations and an ETHERNET LAN. Designated for interim use on DD 963 and FFG-7 Class ships.

INDIVIDUAL MODIFICATION

DATE: **FEBRUARY 1997**

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES: Milestone IV decision ASN (RD&A) approved July 1995.

FINANCIAL PLAN (IN MILLIONS)	FY96															TO COMP		TOTAL	TOTAL	
	QTY	&PRIOR	QTY	FY 97	QTY	FY 98	QTY	FY 99	QTY	FY 00	QTY	FY 01	QTY	FY 02	QTY	FY03	QTY	COST	QTY	COST
<u>RDT&E</u>																				
<u>PROCUREMENT</u>	16	7.2																		7.2
QUANTITY	16																		16	
INSTALLATION KITS																				
INSTALLATION KITS NONRECURRING																				
EQUIPMENT	16	7.2																	16	7.2
EQUIPMENT NONRECURRING																				
ENGINEERING CHANGE ORDERS																				
UNIT COST DATA		0.5																		
TRAINING EQUIPMENT																				
SUPPORT EQUIPMENT																				
OTHER																				
INTERIM CONTRACTOR SUPPORT																				
<u>INSTALLATION OF HARDWARE</u>																				
FY95 EQUIPMENT & PRIOR			16	1.4															16	1.4
FY96 EQUIPMENT																				
FY97 EQUIPMENT																				
FY98 EQUIPMENT																				
FY99 EQUIPMENT																				
FY00 EQUIPMENT																				
FY01 EQUIPMENT																				
TO COMPLETE																				
TOTAL INSTALLATION COST				1.4															16	1.4
TOTAL PROCUREMENT COST				0.0																7.2
TOTAL COST				1.4																8.6

METHOD OF IMPLEMENTATION:		Tiger Team/AIT		ADMINISTRATIVE LEADTIME:		6 Months		PRODUCTION LEADTIME:		4 Months		THE INVENTORY OBJECTIVE FOR THIS ITEM IS		16
CONTRACT DATE:		PRIOR YEAR:		May-94		CURRENT YEAR:		N/A		BUDGET YEAR:		N/A		N/A
PRODUCTION DELIVER DATE:		PRIOR YEAR:		Sep-96		CURRENT YEAR:		Oct-96		BUDGET YEAR:		N/A		N/A
INSTALLATION SCHEDULE:														
INPUT =====>		FY96	FY97	FY98	FY99	FY00	FY01	FY02	FY03	TC				
		<u>1, 2, 3, 4</u>	<u>1, 2, 3, 4</u>	<u>1, 2, 3, 4</u>	<u>1, 2, 3, 4</u>	<u>1, 2, 3, 4</u>	<u>1, 2, 3, 4</u>	<u>1, 2, 3, 4</u>	<u>1, 2, 3, 4</u>	<u>1, 2, 3, 4</u>	<u>1, 2, 3, 4</u>	<u>TOTAL</u>		
FY 96 & PRIOR			3, 4, 3, 6									16		
FY 97														
FY 98														
FY 99														
FY 00														
FY 01														
FY 02														
FY 03														
TO COMPLETE														
TOTAL			3, 4, 3, 6									16		
OUTPUT =====>		FY96	FY97	FY98	FY99	FY00	FY01	FY02	FY03	TC				
		<u>1, 2, 3, 4</u>	<u>1, 2, 3, 4</u>	<u>1, 2, 3, 4</u>	<u>1, 2, 3, 4</u>	<u>1, 2, 3, 4</u>	<u>1, 2, 3, 4</u>	<u>1, 2, 3, 4</u>	<u>1, 2, 3, 4</u>	<u>1, 2, 3, 4</u>	<u>1, 2, 3, 4</u>	<u>TOTAL</u>		
FY 96 & PRIOR			3, 4, 3, 6									16		
FY 97														
FY 98														
FY 99														
FY 00														
FY 01														
FY 02														
FY 03														
TO COMPLETE														
TOTAL			3, 4, 3, 6									16		
Exhibit P-3A														

CLASSIFICATION: UNCLASSIFIED

INDIVIDUAL MODIFICATION

DATE: FEBRUARY 1997

MODIFICATION TITLE: POINT DEFENSE SYSTEM

MODELS OF SYSTEM AFFECTED: SHIP SELF DEFENSE SYSTEM (SSDS) MK 1

DESCRIPTION/JUSTIFICATION: Implements an evolutionary acquisition of improved ship self defense capabilities against anti-ship cruise missiles for selected non-AEGIS ships by integrating existing and programmed anti-air warfare stand-alone systems. It provides an automated quick reaction and multi-target engagement capability emphasizing performance in the littoral environment. Integration focuses on coordination existing sensor/existing sensor information, providing threat identification and evaluation, assessing defensive readiness, and recommending optimized defensive tactical response to counter single and multiple anti-ship cruise missile attacks.

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES: Milestone III decision pending ASN (RD&A) approval.

FINANCIAL PLAN (IN MILLIONS)	FY96																TO COMP		TOTAL	TOTAL
	QTY	&PRIOR	QTY	FY 97	QTY	FY 98	QTY	FY 99	QTY	FY 00	QTY	FY 01	QTY	FY 02	QTY	FY 03	QTY	COST	QTY	COST
RD&E	7	106.3																	7	106.3
PROCUREMENT																				
QUANTITY	3	11.3	0	0.0	0	0.0	5	14.9	9	27.0	9	28.6	6	27.3	3	22.7			35	131.8
INSTALLATION KITS																				
INSTALLATION KITS NONRECURRING (COTS REPLACEMENT)		0.0		0.0		0.0		0.0		3.3		2.8		2.9		0.8		10.0		
EQUIPMENT	3	11.3	0	0.0	0	0.0	4	13.2	6	21.9	9	28.6	6	27.3	3	22.7			31	125.0
EQUIPMENT NONRECURRING																				
ENGINEERING CHANGE ORDERS		0.0		0.0		0.0		2.0		2.9		3.6		3.3		8.1		7.6		19.9
UNIT COST DATA		15.2						3.0		3.0		3.2		4.6		7.6				
TRAINING EQUIPMENT									2	3.4									2	3.4
SUPPORT EQUIPMENT							1	1.7	1	1.7									2	3.4
OTHER		4.0		9.6		0.0		5.2		10.8		10.8		7.9		8.3		4.2		56.6
INTERIM CONTRACTOR SUPPORT																			35	208.2
INSTALLATION OF HARDWARE*																				
FY96 EQUIPMENT & PRIOR	0	0.02	2	9.7															2	9.7
FY97 EQUIPMENT					1	5.8													1	5.8
FY98 EQUIPMENT							0	0.6											0	0.6
FY99 EQUIPMENT									5	16.8									5	16.8
FY00 EQUIPMENT											9	19.4							9	19.4
FY01 EQUIPMENT													9	26.1					9	26.1
FY02 EQUIPMENT															6	19.1			6	19.1
FY03 EQUIPMENT																	3	10.5	3	10.5
TO COMPLETE																				
TOTAL INSTALLATION COST		0.0		9.7		5.8		0.6		16.8		19.4		26.1		19.1		10.5	35	108.1
TOTAL PROCUREMENT COST		15.3		9.6		0.0		22.1		44.0		45.8		41.4		39.9		21.8		239.8
TOTAL COST		15.3		19.2		5.8		22.7		60.8		65.2		67.5		59.0		32.3		347.9

METHOD OF IMPLEMENTATION:		AIT/Shipyard	ADMINISTRATIVE LEADTIME:		4 Months	PRODUCTION LEADTIME:		6 Months	THE INVENTORY OBJECTIVE FOR THIS ITEM IS		35
CONTRACT DATE:	Sep-96		PRIOR YEAR:	Sep-96	CURRENT YEAR:	Jan-97	BUDGET YEAR:	Jan-98	BUDGET YEAR 2:	Jan-99	
PRODUCTION DELIVER DATE:	Apr-97		PRIOR YEAR:	Apr-97	CURRENT YEAR:	Jul 97/Jan 9	BUDGET YEAR:	N/A	BUDGET YEAR 2:	Jan-00	

INSTALLATION SCHEDULE:										
INPUT =====>	FY96	FY97	FY98	FY99	FY00	FY01	FY02	FY03	TC	TOTAL
	<u>1, 2, 3, 4</u>	<u>1, 2, 3, 4</u>	<u>1, 2, 3, 4</u>	<u>1, 2, 3, 4</u>	<u>1, 2, 3, 4</u>	<u>1, 2, 3, 4</u>	<u>1, 2, 3, 4</u>	<u>1, 2, 3, 4</u>	<u>1, 2, 3, 4</u>	
FY 96 & PRIOR	0, 0, 0, 0	0, 1, 2, 0								2
FY 97			0, 0, 1, 0							1
FY 98				0, 0, 0, 1						0
FY 99					0, 1, 1, 3					5
FY 00						2, 3, 2, 0				9
FY 01							2, 4, 1, 2			9
FY 02								1, 3, 1, 1		6
FY 03									2, 1, 0, 0	3
TO COMPLETE										
TOTAL	0, 0, 0, 0	0, 1, 2, 0	0, 0, 1, 0	0, 0, 0, 1	0, 1, 1, 3	2, 3, 2, 0	2, 4, 1, 2	1, 3, 1, 1	2, 1, 0, 0	35
OUTPUT =====>	FY96	FY97	FY98	FY99	FY00	FY01	FY02	FY03	TC	TOTAL
	<u>1, 2, 3, 4</u>	<u>1, 2, 3, 4</u>	<u>1, 2, 3, 4</u>	<u>1, 2, 3, 4</u>	<u>1, 2, 3, 4</u>	<u>1, 2, 3, 4</u>	<u>1, 2, 3, 4</u>	<u>1, 2, 3, 4</u>	<u>1, 2, 3, 4</u>	
FY 96 & PRIOR	0, 0, 0, 0	0, 1, 2, 0								2
FY 97			0, 0, 1, 0							1
FY 98				0, 0, 0, 1						0
FY 99					0, 1, 1, 3					5
FY 00						2, 3, 2, 0				9
FY 01							2, 4, 1, 2			9
FY 02								1, 3, 1, 1		6
FY 03									2, 1, 0, 0	3
TO COMPLETE										
TOTAL	0, 0, 0, 0	0, 1, 2, 0	0, 0, 1, 0	0, 0, 0, 1	0, 1, 1, 3	2, 3, 2, 0	2, 4, 1, 2	1, 3, 1, 1	2, 1, 0, 0	35

P-1 SHOPPING LIST

Exhibit P-3A

* Includes FMP Install Planning and/or Non-FMP Installation

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CLASSIFICATION:

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TIME PHASED REQUIREMENTS SCHEDULE (SUPPLEMENT SHEET-INSTALLATION DATA) P-23A												DATE February 1997							
APPROPRIATION/BUDGET ACTIVITY OTHER PROCUREMENT, NAVY/4 ORDNANCE SUPPORT EQUIP								P-1 ITEM NOMENCLATURE SHIP SELF DEFENSE SYSTEM (SSDS) MK 0 - 5239											
1ST QTR		2ND QTR		3RD QTR		4TH QTR		1ST QTR		2ND QTR		3RD QTR		4TH QTR					
E.I./L	QTY	E.I./L	QTY	E.I./L	QTY	E.I./L	QTY	E.I./L	QTY	E.I./L	QTY	E.I./L	QTY	E.I./L	QTY				
FY 1996								FY 1997											
								FFG 51	1	FFG 48	1	FFG 47	1	FFG 36	1				
								FFG 54	1	FFG 52	1	FFG 53	1	FFG 37	1				
								FFG 57	1	FFG 55	1	FFG 59	1	FFG 43	1				
										FFG 60	1			FFG 50	1				
														FFG 58	1				
														FFG 61	1				
FY 1998								FY 1999											

P-1 SHOPPING LIST

CLASSIFICATION:

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UNCLASSIFIED

CLASSIFICATION:

UNCLASSIFIED

TIME PHASED REQUIREMENTS SCHEDULE (SUPPLEMENT SHEET-INSTALLATION DATA) P-23A												DATE February 1997							
APPROPRIATION/BUDGET ACTIVITY OTHER PROCUREMENT, NAVY/4 ORDNANCE SUPPORT EQUIPM								P-1 ITEM NOMENCLATURE SHIP SELF DEFENSE SYSTEM (SSDS) MK 1 - 5239											
1ST QTR		2ND QTR		3RD QTR		4TH QTR		1ST QTR		2ND QTR		3RD QTR		4TH QTR					
E.I./L	QTY	E.I./L	QTY	E.I./L	QTY	E.I./L	QTY	E.I./L	QTY	E.I./L	QTY	E.I./L	QTY	E.I./L	QTY				
FY 1996								FY 1997											
										LSD 44	1	LSD 42 LSD 49	1 1						
FY 1998								FY 1999											
				LSD 45	1									ISEA NON-FMP	1				

CLASSIFICATION:

UNCLASSIFIED

PEO/DRPM CONTROLLED RESOURCES

BUDGET ITEM JUSTIFICATION SHEET								DATE: February 1997
APPROPRIATION/BUDGET ACTIVITY OTHER PROCUREMENT, NAVY BA-4: ORDNANCE SUPPORT EQUIPMENT					P-1 ITEM NOMENCLATURE AEGIS SUPPORT EQUIPMENT - 524600/524605			
	FY 1996	FY 1997	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003
QUANTITY								
COST (\$M) TOTAL	61.9	32.7	26.8	46.5	72.0	67.5	76.8	77.6

Item Description/Justification

1. This program provides equipments for shore facilities and for shipboard upgrades to support the battle readiness of AEGIS Cruisers and Destroyers in the following areas:
 - a. Special Tooling and Test Equipment for AEGIS unique depots;
 - b. Computer, displays and simulators for the AEGIS Computer Center (ACC) at Dahlgren, Va.;
 - c. Weapon/Combat System equipments for the AEGIS Combat System Center (ACSC) at Wallops Island, Va.;
 - d. Weapon System Training equipment for the AEGIS Education Center (AEC) at Dahlgren, Va.;
 - e. AEGIS Weapon System ORDALT procurement;
 - f. AEGIS Weapon System SHIPALT procurement;
 - g. AEGIS Common Equipment to support shorter Regular Overhauls and Selected Restricted Availabilities. Includes Weapon and Ship System components that require long repair turn-around;
 - h. Field Activity Integrated Communications Equipment;
 - i. Warfighting Improvement Program (WIP) alteration equipment;
Provides UYK-43 (LoBoy) computers, COTS Computer and other SHIPALT equipment for baseline 3 Cruisers; and;
 - j. Warfighting Improvement Program (WIP) alteration equipment, Baseline 2 Upgrade and COTS Computer and Consoles;
 - k. Engineering Control and Surveillance Equipment (ECSE);
 - l. Shipboard equipment Installation.
2. The FY 1996-03 funds will be used to upgrade three centers (AEGIS Computer Center, AEGIS Education Center and AEGIS Combat Systems Center) to properly accommodate CG 47 and DDG 51 Combat System Baselines and to provide shipboard SHIPALT and ORDALT equipments for four CG 47 Class Cruiser Baselines and two Destroyer Baselines. Funding is for the installation of equipment including the Fleet Modernization Program, training equipment, and other shore facilities. These include, among others, the following major Weapon/Combat systems:
3. The budget reflects the transfer of design services into the appropriate equipment P-1 line item in accordance with full funding policy FY 98 and out.

BUDGET ITEM JUSTIFICATION SHEET

(CONTINUATION)

DATE:

(EXHIBIT P-40 cont.)

February 1997

APPROPRIATION/BUDGET ACTIVITY

P-1 ITEM NOMENCLATURE

OTHER PROCUREMENT, NAVY, BA-4: ORDNANCE SUPPORT EQUIPMENT

AEGIS SUPPORT EQUIPMENT - 524600

DESCRIPTION

APPLICABLE HULLS

o CG BASELINE 1

- SPY-1A RADAR
- AEGIS DISPLAY SYSTEM MARK 1
- MARK 26 LAUNCHING SYSTEM
- LAMPS MARK III HELICOPTER
- MK 116 MOD 4 UNDERWATER FIRE CONTROL
- UYK-7/20 COMPUTERS
- UYA-4 DISPLAYS
- MK 86 GUNFIRE CONTROL SYSTEM

CG 47 - CG 51

o CG BASELINE 2

- CG BASELINE 1 PLUS
- TOMAHAWK WEAPON SYSTEM
- ANTI-SUBMARINE WARFARE UPGRADE SQQ-89
- MK 41 VERTICAL LAUNCH SYSTEM IN PLACE OF MK 26
- BACKFIT COMPUTERS/AN/UYQ-70 DISPLAYS
- ECSE UPGRADE/COTS COMPUTER

CG 52 - CG 58

o CG BASELINE 3

- CG BASELINE 2 PLUS
- SPY-1B RADAR IN PLACE OF SPY-1A
- UYQ-21 DISPLAYS IN PLACE OF UYA-4
- BACKFIT UYK-43 (LoBoy)/44 COMPUTERS
- ECSE UPGRADE/COTS COMPUTER

CG 59 - CG 64

o CG BASELINE 4

- CG BASELINE 3 PLUS
- VERTICAL LAUNCH ASROC
- SM-2 MISSILE UPGRADE
- UYK 43/44 COMPUTERS IN PLACE OF UYK-7/20s
- ECSE UPGRADE/COTS COMPUTERS

CG 65 - CG 73

o DDG BASELINE 4

- CG BASELINE 3 PLUS
- SPY-1D RADAR IN PLACE OF SPY-1B
- MK 160 GUN COMPUTING SYSTEM IN PLACE OF MK 86
- UYK 43/44 COMPUTERS IN PLACE OF UYK-7/20s

DDG 51 - DDG 67

o DDG BASELINE 5

- DDG BASELINE 4 PLUS
- JOINT TACTICAL INFORMATION DISTRIBUTION SYSTEM (JTIDS)/
COMMAND AND CONTROL (C2P)
- TADIL J
- COMBAT DIRECTION FINDING (DF)
- TACTICAL DATA INFORMATION EXCHANGE SYSTEM (TADIX B)
- AN/SLQ-32(V) 3 ACTIVE ELECTRONIC COUNTERMEASURES (ECM)
- AEGIS EXTENDED RANGE (ER) MISSILE

DDG 68 - DDG 76

BUDGET ITEM JUSTIFICATION SHEET						(CONTINUATION)		DATE: February 1997	
(EXHIBIT P-40 cont.)									
APPROPRIATION/BUDGET ACTIVITY						P-1 ITEM NOMENCLATURE			
OTHER PROCUREMENT, NAVY, BA-4: ORDNANCE SUPPORT EQUIPMENT						AEGIS SUPPORT EQUIPMENT - 524600/524605			
3. PLANNED MODIFICATIONS									
<p>3a. MODIFICATION TITLE:AEGIS CRUISER, BASELINE 3, ENGINEERING BASE UPGRADE.</p> <p>MODELS OF SYSTEMS AFFECTED: AEGIS WEAPONS SYSTEM</p> <p>DESCRIPTION/JUSTIFICATION:</p> <p style="padding-left: 40px;">The Baseline 3 upgrade provides major performance enhancements in the areas of force command, Anti-Air Warfare (AAW), and Strike Warfare (STW) which are required to meet Navy Force Level warfare objectives. The upgrade provides the required computing and display capability to accommodate Cooperative Engagement Capability (CEC), Theater Ballistic Missile Defense TBMD, JTIDS and SM-2 Block IV missiles.</p>									
FY 1996 & PRIOR	FY 1997	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003		
\$152.2	\$10.3	\$7.3	\$15.4	\$8.6	\$0.0	\$0.0	\$0.0		
<p>3b. MODIFICATION TITLE:AEGIS WEAPON SYSTEM ORDNANCE ALTERATIONS (AWS ORDALTS)</p> <p>MODELS OF SYSTEMS AFFECTED: AEGIS WEAPONS SYSTEM</p> <p>DESCRIPTION/JUSTIFICATION: MISCELLANEOUS AEGIS WEAPON SYSTEM ORDALTS (CG/DDG).</p> <p style="padding-left: 40px;">This program provides for procurement and installation of emerging fact-of-life and safety modifications to the AEGIS Weapon System (AWS). These requirements will continue through the life of the Ships.</p>									
FY 1996 & PRIOR	FY 1997	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003		
\$26.4	\$5.2	\$4.4	\$8.0	\$8.6	\$9.5	\$9.4	\$10.0		

BUDGET ITEM JUSTIFICATION SHEET						(CONTINUATION)		DATE:	
(EXHIBIT P-40 cont.)								February 1997	
APPROPRIATION/BUDGET ACTIVITY					P-1 ITEM NOMENCLATURE				
OTHER PROCUREMENT, NAVY, BA-4: ORDNANCE SUPPORT EQUIPMEN					AEGIS SUPPORT EQUIPMENT - 524600/524605				
<p>3c. MODIFICATION TITLE: AEGIS WEAPON SYSTEM SHIP ALTERATIONS (AWS SHIPALTS)</p> <p>MODELS OF SYSTEMS AFFECTED: AEGIS WEAPONS SYSTEM</p> <p>DESCRIPTION/JUSTIFICATION: MISCELLANEOUS AEGIS WEAPONS SYSTEM SHIPALTS (CG/DDG).</p> <p style="padding-left: 40px;">This program provides for procurement and installation of emerging fact-of-life, and safety modifications to the AEGIS Weapon System (AWS), including alterations which are prerequisite to AWS interoperability/compatability with other systems (TBMD/JTIDS/CEC/Tomahawk). These requirements will continue through the life of the Ships. These SHIPALTS vary in scope and will be installed by Alteration Installation Teams and Public or Private Shipyards.</p>									
FY 1996 & PRIOR	FY 1997	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003		
\$0.0	\$6.2	\$6.0	\$9.2	\$24.6	\$23.0	\$20.9	\$20.0		
<p>3d. MODIFICATION TITLE: AEGIS WEAPON SYSTEM, DESIGN SERVICE ALLOCATION (DSA).</p> <p>MODELS OF SYSTEMS AFFECTED: AEGIS WEAPONS SYSTEM</p> <p>DESCRIPTION/JUSTIFICATION:</p> <p style="padding-left: 40px;">This funds the planning yards to develop work packages to support the upgrades procured by this account.</p>									
FY 1996 & PRIOR	FY 1997	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003		
\$0.0	\$0.0	\$4.2	\$6.8	\$4.0	\$5.4	\$4.2	\$6.7		

PEO/DRPM CONTROLLED RESOURCES

WEAPON SYSTEM COST ANALYSIS		A: APPROPRIATION/BUDGET		B. WEAPON		C. MANUFACTURER NAME		D:DATE		
EXHIBIT (P-5)		Activity Title No. OTHER PROCURMENT, NAVY, BA-4 ORDNANCE SUPPORT EQUIPMENT		MODEL/SERIES/POPULAR NAME: AEGIS SUPPORT EQUIPMENT		PLANT CITY/STATE LOCATION: VARIOUS (See P-5A)		February 1997		
WEAPON SYSTEM COST ELEMENTS (1)	COST CODE (2)	IDENT CODE (3)	TOTAL COST IN THOUSANDS OF DOLLARS							
			FY 96		FY 97		FY 98		FY 99	
			QTY (4)	TOTAL COST (5)	QTY (6)	TOTAL COST (7)	QTY (8)	TOTAL COST (9)	QTY (10)	TOTAL COST (11)
DEPOT SPECIAL TOOLING AND TEST EQUIPMEN	L7001	A		1,900		500		1,918		1,500
WEARABLE COMPUTER	L7002	A		0		3,000		0		0
AEGIS COMPUTER CENTER EQUIPMENT	L7003	A		500		3,238		409		1,364
AEGIS COMBAT SYSTEM CENTER EQUIPMENT	L7006	A		500		1,985		728		2,762
AEGIS EDUCATION CENTER EQUIPMENT	L7007	A		944		1,000		373		909
AEGIS WEAPON SYSTEM ORDALTS	L7010	A		3,000		3,341		3,334		3,000
AEGIS WEAPON SYSTEM SHIPALTS	L7011	A		0		5,200		5,215		7,361
AEGIS COMMON EQUIPMENT	L7013	A		1,953		1,589		1,697		485
FIELD ACT'Y INTEGRATED COMM EQPT	L7016	A		438		305		178		438
AEGIS WIP ALTERATION EQUIPMENT B/L 3	L7017	A		40,530		0		0		0
PROCUREMENT SUB-TOTAL				49,765		20,158		13,852		17,819
DESIGN SERVICE ALLOCATION (DSA)	L7DSA	A		0		0		4,255		6,782
INSTALLATION OF EQUIPMENT, FMP	L7600	A		12,095		12,543		8,706		21,947
TOTAL				61,860		32,701		26,813		46,548

P-1 SHOPPING LIST

Exhibit P-5

Note: FY 97 ...

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BUDGET PROCUREMENT HISTORY AND PLANNING EXHIBIT (P-5A)										A: DATE: February 1997	
B. APPROPRIATION/BUDGET ACTIVITY OTHER PROCUREMENT, NAVY, BA-4: ORDNANCE SUPPORT EQUIPMENT					C. P-1 ITEM NOMENCLATURE AEGIS SUPPORT EQUIPMENT						
COST CODE	LINE ITEM/ FISCAL YEAR	CONTRACTOR AND LOCATION	CONTRACT METHOD & TYPE	CONTRACTED BY	AWARD DATE	DATE OF FIRST DELIVERY	QUANTITY	UNIT COST (\$000)	SPECS AVAILABLE NOW	SPECS REV REQ'D	IF YES, WHEN AVAILABLE
L7002	Wearable Computer FY 1997	CDI Bloomington, MN 55431	BOA	NAVSEA	TBD*	TBD*	N/A	\$3,000	YES	NO	-
L7003	AEGIS COMPUTER CENTER EQUIPMENT ACCIS COMPONENTS FY 1996	Various	SS/FP	NAVSEA	3/96	11/96	1 LOT	500	YES	NO	-
	CABLE FY 1997	UNICOR Memphis, TN 38134	SS/FP	NAVSEA	3/97	1/99	1 LOT	750	YES	NO	-
	COMBAT SYSTEMS COMPONENTS FY 1997	VAR	TBD	NSWC/DD	5/97	2/99	1 LOT	1,188	YES	NO	-
	CP MODERNIZATION FY 1997	DEC Greenbelt, MD 20770	SS/FP	NSWC/DD	4/97	1/99	1 LOT	800	YES	NO	-
	C-SCA NETWORK FY 1997	DEC Greenbelt, MD 20770	SS/FP	NSWC/DD	4/97	1/99	1 LOT	500	YES	NO	-
	COMMERCIAL SYSTEM COMPONENTS FY 1998	VAR	TBD	NSWC/DD	5/98	2/00	1 LOT	409	YES	NO	-
	CABLE FY 1999	UNICOR Memphis, TN 38134	SS/FP	NAVSEA	3/99	1/01	1 LOT	1364	YES	NO	-
L7006	AEGIS COMBAT SYSTEM CENTER EQPT NON-TACTICAL EQUIPMENT FY 1996	VAR	TBD	NSWC/DD	2/96	12/96	1 LOT	500	YES	NO	-
	COMBAT SYSTEM COMPONENTS FY 1997	VAR	TBD	NSWC/DD	2/97	12/97	1 LOT	985	YES	NO	-
D. REMARKS * NAVCOMPT Deferred Funds.											

BUDGET PROCUREMENT HISTORY AND PLANNING EXHIBIT (P-5A)										A: DATE: February 1997	
B. APPROPRIATION/BUDGET ACTIVITY OTHER PROCUREMENT, NAVY, BA-4: ORDNANCE SUPPORT EQUIPMENT					C. P-1 ITEM NOMENCLATURE AEGIS SUPPORT EQUIPMENT						
COST CODE	LINE ITEM/ FISCAL YEAR	CONTRACTOR AND LOCATION	CONTRACT METHOD & TYPE	CONTRACTED BY	AWARD DATE	DATE OF FIRST DELIVERY	QUANTITY	UNIT COST (\$000)	SPECS AVAILABLE NOW	SPECS REV REQ'D	IF YES, WHEN AVAILABLE
L7006 (CONT.	AEGIS COMBAT SYSTEM CENTER EQPT UYH-16 FY 1997	CDI Bloomington, MN 55431	BOA	NAVSEA	2/97	12/97	1 LOT	1,000	YES	NO	-
	NON-TACTICAL EQUIPMENT FY 1998	VAR	TBD	NSWC/DD	2/98	12/98	1 LOT	728	YES	NO	-
	EQUIPMENT MODERNIZATION FY 1999	VAR	TBD	NSWC/DD	2/99	12/99	1 LOT	2,762	YES	NO	-
L7007	AEGIS EDUCATION CENTER EQUIPMENT CAST PART TASK TRAINER/EMULATOR FY 1996	NOS/IH Indian Head, MD 20640	WR	CO ATC/DL	1/96	1/98	1 LOT	259	YES	NO	-
	STD TRAINING ACTIVITY SUPT SYS (STASS) FY 1996	CNET PENSACOLA	WR	CO ATC/DL	1/96	2/97	1 LOT	685	YES	NO	-
	FAULT INSERTION DEVICES (FIDS) FY 1997	HUGHES Fullerton, CA 92634	BOA	NAVSEA	4/97	1/98	1 LOT	175	YES	NO	-
	CAST PART TASK TRAINER/EM FY 1997	HUGHES Fullerton, CA 92634	BOA	NAVSEA	4/97	1/98	1 LOT	425	YES	NO	-
	COMBAT SYSTEM COMPONENTS (CHILLER/COOLER) FY1997	VAR	TBD	NSWC/DD	1/97	1/99	1 LOT	400	YES	NO	-
	CAST PART TASK TRAINER/EMULATOR FY 1998	NOS/IH Indian Head, MD 20640	WR	CO ATC/DL	1/98	1/00	1 LOT	373	YES	NO	-
	COMBAT SYSTEM COMPONENTS FY 1999	CO ATC DL	WR	NAVSEA	1/99	1/00	1 LOT	909	YES	NO	-
	D. REMARKS										

BUDGET PROCUREMENT HISTORY AND PLANNING EXHIBIT (P-5A)										A: DATE: February 1997	
B. APPROPRIATION/BUDGET ACTIVITY OTHER PROCUREMENT, NAVY, BA-4: ORDNANCE SUPPORT EQUIPMENT					C. P-1 ITEM NOMENCLATURE AEGIS SUPPORT EQUIPMENT						
COST CODE	LINE ITEM/ FISCAL YEAR	CONTRACTOR AND LOCATION	CONTRACT METHOD & TYPE	CONTRACTED BY	AWARD DATE	DATE OF FIRST DELIVERY	QUANTITY	UNIT COST (\$000)	SPECS AVAILABLE NOW	SPECS REV REQ'D	IF YES, WHEN AVAILABLE
L7010	AWS WEAPON SYSTEM ORDALTS O/A 20254, ECP A1438R1 FY 1996	LOCKHEED/MARTIN Moorestown, NJ 08057	BOA	DCMC/LM	3/96	6/96	2	264	YES	NO	-
	O/A TBD, ECP A1542 FY 1996	LOCKHEED/MARTIN Moorestown, NJ 08057	BOA	DCMC/LM	3/96	3/98	13	23	YES	NO	-
	O/A TBD, ECP R1524A1 FY 1996	RAYTHEON Burlington, MA 01803	BOA	DPRO/ RAYTHEON	2/96	4/98	2	355	YES	NO	-
	O/A 20278, ECP R1541 FY 1996	RAYTHEON Burlington, MA 01803	BOA	DPRO/ RAYTHEON	2/96	8/96	7	48	YES	NO	-
	O/A 20284, ECP R1560A1 FY 1996	RAYTHEON Burlington, MA 01803	BOA	DPRO/ RAYTHEON	2/96	11/96	156	2	YES	NO	-
	O/A 20283, ECP R1546R1 FY 1996	RAYTHEON Burlington, MA 01803	BOA	DPRO/ RAYTHEON	2/96	8/96	63	5	YES	NO	-
	O/A 20286/20287, ECP A1552 FY 1996	LOCKHEED MARTIN Moorestown, NJ 08057	BOA	DCMC/LM	7/96	5/97	10	50	YES	NO	-
	20259 TBD, ECP R1524A2 FY 1997	RAYTHEON Burlington, MA 01803	BOA	DPRO/ RAYTHEON	4/97	5/98	3	333	YES	NO	-
	O/A 20286/20287, ECP A1552 FY 1997	LOCKHEED MARTIN Moorestown, NJ 08057	BOA	DCMC/LM	3/97	5/98	10	51	YES	NO	-
	O/A TBD, ECP A1543 FY 1997	RAYTHEON Burlington, MA 01803	BOA	DPRO/ RAYTHEON	3/97	5/98	22	25	YES	NO	-
	O/A 20254, ECP A1438R1 FY 1997	LOCKHEED/MARTIN Moorestown, NJ 08057	BOA	DCMC/LM	4/97	5/98	4	270	YES	NO	-
	O/A TBD, ECP A1542 FY 1997	LOCKHEED/MARTIN Moorestown, NJ 08057	BOA	DCMC/LM	3/97	5/98	8	25	YES	NO	-
D. REMARKS DCMC/LM: Defense Contract Management Command/Lockheed Martin DPRO: Defense Plant Representative Office											

P-1 SHOPPING LIST

Exhibit P-5A

BUDGET PROCUREMENT HISTORY AND PLANNING EXHIBIT (P-5A)										A: DATE: February 1997	
B. APPROPRIATION/BUDGET ACTIVITY OTHER PROCUREMENT, NAVY, BA-4: ORDNANCE SUPPORT EQUIPMENT					C. P-1 ITEM NOMENCLATURE AEGIS SUPPORT EQUIPMENT						
COST CODE	LINE ITEM/ FISCAL YEAR	CONTRACTOR AND LOCATION	CONTRACT METHOD & TYPE	CONTRACTED BY	AWARD DATE	DATE OF FIRST DELIVERY	QUANTIT	UNIT COST (\$000)	SPECS VAILABL NOW	SPECS REV REQ'D	IF YES, WHEN AVAILABLE
L7010 (Continued)	O/A 20254, ECP A1438R1 FY 1998	LOCKHEED/MARTIN Moorestown, NJ 08057	BOA	DCMC/LM	5/98	6/99	2	276	YES	NO	-
	O/A 20286/20287, ECP A1552 FY 1998	LOCKHEED MARTIN Moorestown, NJ 08057	BOA	DCMC/LM	4/98	6/99	10	52	YES	NO	-
	O/A TBD, ECP A1543 FY 1998	RAYTHEON Burlington, MA 01803	BOA	DPRO/ RAYTHEON	4/98	5/99	15	25	YES	NO	-
	20259 TBD, ECP R1524A2 FY 1998	RAYTHEON Burlington, MA 01803	BOA	DPRO/ RAYTHEON	4/98	5/99	3	341	YES	NO	-
	O/A TBD, ECP L1528 FY 1998	Power Paragon Anaheim, CA 92807	BOA	DCMAO/ Santa Ana	2/98	8/98	TBD	864	YES	NO	-
	20259 TBD, ECP R1524A2 FY 1999	RAYTHEON Burlington, MA 01803	BOA	DPRO/ RAYTHEON	5/99	5/00	3	348	YES	NO	-
	O/A 20097, ECP A1335R1C3 FY 1999	RAYTHEON Burlington, MA 01803	BOA	DPRO/ RAYTHEON	2/99	2/00	1 LOT	800	YES	NO	-
	O/A TBD, ECP A1449C2 FY 1999	LOCKHEED/MARTIN Moorestown, NJ 08057	BOA	DCMC/LM	5/99	6/00	1 LOT	700	YES	NO	-
	O/A 20224, ECP R1452R1A1 FY 1999	RAYTHEON Burlington, MA 01803	BOA	DPRO/ RAYTHEON	5/99	5/00	1 LOT	456	YES	NO	-
D. REMARKS											
DCMAO: Defense Control Management Area Office Power Paragon (formely MAGNATECH)				DCMC/LM: Defense Contract Management Command/Lockheed Martin DPRO: Defense Plant Representative Office							

P-1 SHOPPING LIST

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Exhibit P-5A

BUDGET PROCUREMENT HISTORY AND PLANNING EXHIBIT (P-5A)										A: DATE: February 1997	
B. APPROPRIATION/BUDGET ACTIVITY OTHER PROCUREMENT, NAVY, BA-4: ORDNANCE SUPPORT EQUIPMENT					C. P-1 ITEM NOMENCLATURE AEGIS SUPPORT EQUIPMENT						
COST CODE	LINE ITEM/ FISCAL YEAR	CONTRACTOR AND LOCATION	CONTRACT METHOD & TYPE	CONTRACTED BY	AWARD DATE	DATE OF FIRST DELIVERY	QUANTITY	UNIT COST (\$000)	SPECS AVAILABLE NOW	SPECS REV REQ'D	IF YES, WHEN AVAILABLE
L7011	AEGIS WEAPON SYSTEM SHIPALTS MMSD, AN/UYH-16 FY 1997	CDI Bloomington, MN 55431	SS/FP	NAVSEA	4/97	2/99	2	206	YES	NO	-
	RD358 Refurbishment/Reconfiguration FY 1997	NSWC/Crane	WR	NAVSEA	4/97	2/99	4	130	YES	NO	-
	SGS, New Generation Computer, MK 162 FY 1997	CDI Bloomington, MN 55431	SS/FP	NAVSEA	4/97	2/99	5	155	YES	NO	-
	UYK 43 ModKits FY 1997	LMTS St. Paul, MN 55164	SS/FP	NAVSEA	4/97	2/99	5	36	YES	NO	-
	BFTT, C/P Integration FY 1997	VAR	TBD	NSWC/DD	3/97	4/98	N/A	1,936	YES	NO	-
	BFTT, Supplemental Components FY 1997	NSWC/PD	WR	NAVSEA	4/97	4/98	3	159	YES	NO	-
	MFL, Multi-Frequency Link 11 Data Time Set FY 1997	MIKROS	WR	FISC/WNY	4/97	4/98	6	150	YES	NO	-
	MMSD, AN/UYH-16 FY 1998	CDI Bloomington, MN 55431	SS/FP	NAVSEA	4/98	2/00	2	211	YES	NO	-
	SGS, New Generation Computer, MK 162 FY 1998	CDI Bloomington, MN 55431	SS/FP	NAVSEA	4/98	2/00	6	158	YES	NO	-
	UYK 43 ModKits FY 1998	LMTS St. Paul, MN 55164	SS/FP	NAVSEA	4/98	2/00	6	37	YES	NO	-
	SGS UPGRADE FOR DNMFL FY 1998	CDI Bloomington, MN 55431	BOA	NAVSEA	6/98	4/00	14	93	YES	NO	
	ACTs REHOST FY 1998	VAR	WR	NSWC/DD	6/98	4/00	5	126	YES	NO	-
D. REMARKS LMTS: Lockheed Martin Tactical Systems (formerly UNISYS)											

P-1 SHOPPING LIST

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Exhibit P-5A

BUDGET PROCUREMENT HISTORY AND PLANNING EXHIBIT (P-5A)										A: DATE: February 1997	
B. APPROPRIATION/BUDGET ACTIVITY OTHER PROCUREMENT, NAVY, BA-4: ORDNANCE SUPPORT EQUIPMENT					C. P-1 ITEM NOMENCLATURE AEGIS SUPPORT EQUIPMENT						
COST CODE	LINE ITEM/ FISCAL YEAR	CONTRACTOR AND LOCATION	CONTRACT METHOD & TYPE	CONTRACTED BY	AWARD DATE	DATE OF FIRST DELIVERY	QUANTITY	UNIT COST (\$000)	SPECS AVAILABLE NOW	SPECS REV REQ'D	IF YES, WHEN AVAILABLE
L7011	(Continued) ORTS UPGRADE FY 1998	LOCKHEED MARTIN Moorestown, NJ 08057	BOA	NAVSEA	6/98	4/00	5	338	YES	NO	-
	MMSD, AN/UYH-16 FY 1999	CDI Bloomington, MN 55431	SS/FP	NAVSEA	4/99	2/01	3	214	YES	NO	-
	SGS, New Generation Computer, MK 162 FY 1999	CDI Bloomington, MN 55431	SS/FP	NAVSEA	4/99	2/01	8	162	YES	NO	-
	UYK 43 ModKits FY 1999	LMTS St. Paul, MN 55164	SS/FP	NAVSEA	4/99	2/01	4	37	YES	NO	-
	SGS UPGRADE FOR DNMFL FY 1999	CDI Bloomington, MN 55431	BOA	NAVSEA	7/99	5/01	15	95	YES	NO	-
	ACTs REHOST FY 1999	NSWC/DD	WR	NAVSEA	7/99	5/01	7	129	YES	NO	-
	TIP/TIP SWITCH FY 1999	NSWC/PHD	WR	NAVSEA	7/99	5/01	3	982	YES	NO	-
D. REMARKS											

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Exhibit P-5A

BUDGET PROCUREMENT HISTORY AND PLANNING EXHIBIT (P-5A)										A: DATE: February 1997	
B. APPROPRIATION/BUDGET ACTIVITY OTHER PROCUREMENT, NAVY, BA-4: ORDNANCE SUPPORT EQUIPMENT					C. P-1 ITEM NOMENCLATURE AEGIS SUPPORT EQUIPMENT						
COST CODE	LINE ITEM/ FISCAL YEAR	CONTRACTOR AND LOCATION	CONTRACT METHOD & TYPE	CONTRACTED BY	AWARD DATE	DATE OF FIRST DELIVERY	QUANTITY	UNIT COST (\$000)	SPECS AVAILABLE NOW	SPECS REV REQ'D	IF YES, WHEN AVAILABLE
L7013	AEGIS COMMON EQUIPMENT ACE for DDG-51 Class FY 1996	BATH IRON WORKS Bath, ME 04530	SS/FP	SUPSHIPBATH	7/96	1/97	1 LOT	1,000	YES	NO	-
	ACE for CG-47 Class FY 1996	ISI/LITTON Pascagoula, MS 39568	SS/FP	SUPSHIP/PAS	4/96	1/97	1 LOT	953	YES	NO	-
	ACE for DDG-51 Class FY1997	BATH IRON WORKS Bath, ME 04530	SS/FP	SUPSHIPBATH	7/97	1/98	1 LOT	794	YES	NO	-
	ACE for CG-47 Class FY1997	ISI/LITTON Pascagoula, MS 39568	SS/FP	SUPSHIP/PAS	4/97	1/98	1 LOT	795	YES	NO	-
	ACE for DDG-51 Class FY1998	BATH IRON WORKS Bath, ME 04530	SS/FP	SUPSHIPBATH	4/98	1/99	1 LOT	847	YES	NO	-
	ACE for CG-47 Class FY1998	ISI/LITTON Pascagoula, MS 39568	SS/FP	SUPSHIP/PAS	4/98	1/99	1 LOT	850	YES	NO	-
	ACE for DDG-51 Class FY1999	BATH IRON WORKS Bath, ME 04530	SS/FP	SUPSHIPBATH	7/99	1/00	1 LOT	242	YES	NO	-
	ACE for CG-47 Class FY1999	ISI/LITTON Pascagoula, MS 39568	SS/FP	SUPSHIP/PAS	4/99	1/00	1 LOT	243	YES	NO	-
D. REMARKS											

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Exhibit P-5A

BUDGET PROCUREMENT HISTORY AND PLANNING EXHIBIT (P-5A)										A. DATE: February 1997	
B. APPROPRIATION/BUDGET ACTIVITY OTHER PROCUREMENT, NAVY, BA-4: ORDNANCE SUPPORT EQUIPMENT					C. P-1 ITEM NOMENCLATURE AEGIS SUPPORT EQUIPMENT						
COST CODE	LINE ITEM/ FISCAL YEAR	CONTRACTOR AND LOCATION	CONTRACT METHOD & TYPE	CONTRACT BY	AWARD DATE	DATE OF FIRST DELIVERY	QUANTIT	UNIT COST (\$000)	SPECS VAILABL NOW	SPECS REV REQ'D	IF YES, WHEN AVAILABLE
L7017	BASELINE 3 ENG BASE UPGRADE LoBOY UYK-43 COMPUTERS FY 1996	UNISYS St. Paul, MN 55164	SS/FP	NAVSEA	5/96	1/99	8	897	YES	NO	-
	MANNED Q70 CONSOLES FY 1996	UNISYS St. Paul, MN 55164	SS/FP	NAVSEA	3/96	9/98	24	289	YES	NO	-
	UNMANNED Q70, EPS RACKS FY 1996	UNISYS St. Paul, MN 55164	SS/FP	NAVSEA	8/96	5/99	4	667	YES	NO	-
	NEXT GENERATION PERIPHERALS FY 1996	UNISYS St. Paul, MN 55164	SS/FP	NAVSEA	8/96	5/99	2	288	YES	NO	-
	B/L 3 OTHER SHIPALT EQUIPMENT FY 1996, CG-64	HUGHES Fullerton, CA 92634	SS/FP	NAVSEA	8/96	5/99	1	8,768	YES	NO	-
	FY 1996, CG-59 * (see remarks)	HUGHES Fullerton, CA 92634	SS/FP	NAVSEA	8/96	1/99	1	12,412	YES	NO	-
	B/L 3 SITE EQUIPMENT FY 1996	HUGHES Fullerton, CA 92634	SS/FP	NAVSEA	8/96	6/98	1 LOT	1,994	YES	NO	-
D. REMARKS * CG-59 built with UYA 4 Displays vice UYQ 21 Displays. UYQ 21 Displays made available from shore sites will be refurbished for CG-59 but associated peripherals still require procurement.											

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Date: February 1997

MODELS OF SYSTEMS AFFECTED: AEGIS WEAPONS SYSTEM

The Baseline 3 upgrade provides major performance enhancements in the areas of force command, Anti-Air Warfare (AAW), and Strike Warfare (STW) which are required to meet Navy Force Level warfare objectives. The upgrade provides the required computing and display capability to accommodate Cooperative Engagement Capability (CEC), Theater Ballistic Missile Defense (TBMD), JTIDS and SM-2 Block IV missiles.

[illegible]

CONTRACT DATE:	PRIOR YEAR: JUN 94	BUDGET YEAR 1: MAY 96
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[illegible]

MODIFICATION OF WEAPON SYSTEM

Date: February 1997

MODIFICATION TITLE: AEGIS WEAPON SYSTEM ORDNANCE ALTERATIONS (AWS ORDALTS)

MODELS OF SYSTEMS AFFECTED: AEGIS WEAPONS SYSTEM

DESCRIPTION/JUSTIFICATION: MISCELLANEOUS AEGIS WEAPONS SYSTEM ORDALTS (CG/DDG). This program provides for procurement and installation of emerging fact-of-life and safety modifications to the AEGIS Weapon System (AWS). These requirements will continue through the life of the Ships.

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES:

FINANCIAL PLAN: (\$M)	FY 96		FY 97		FY 98		FY 99		FY 00		FY 01		FY 02		FY 03		TO COMPLETE		TOTAL	
	Qty	\$M	Qty	\$M	Qty	\$M	Qty	\$M	Qty	\$M	Qty	\$M	Qty	\$M	Qty	\$M	Qty	\$M	Qty	\$M
RDT&E																				
PROCUREMENT:																				
Kit quantity																				
Installation Kits																				
Installation Kits Nonrecurring																				
Equipment	Var	20.9	Var	3.3	Var	3.3	Var	3.0	Var	5.6	Var	6.1	Var	5.3	Var	5.5	Var	TBD		TBD
Equipment Nonrecurring																				
Engineering Change Orders																				
Data																				
Training Equipment																				
Support Equipment																				
Other																				
Interim Contractor Support																				
Installation of Hardware	Qty	\$M	Qty	\$M	Qty	\$M	Qty	\$M	Qty	\$M	Qty	\$M	Qty	\$M	Qty	\$M	Qty	\$M	Qty	\$M
FY 96 & PRIOR (Var Kits)	Var	5.5	Var	1.9															Var	7.4
FY 97 (Var Kits)					Var	1.1													Var	1.1
FY 98 (Var Kits)							Var	5.0											Var	5.0
FY 99 (Var Kits)									Var	3.0									Var	3.0
FY 00 (Var Kits)											Var	3.4							Var	3.4
FY 01 (Var Kits)													Var	4.1					Var	4.1
FY 02 (Var Kits)															Var	4.5			Var	4.5
FY 03 (Var Kits)																	Var	TBD	Var	TBD
TC (TBD Kits)																	Var	TBD	Var	TBD
Total Installation Cost	Var	5.5	Var	1.9	Var	1.1	Var	5.0	Var	3.0	Var	3.4	Var	4.1	Var	4.5	Var	TBD	Var	TBD
Total Procurement Cost		20.9		3.3		3.3		3.0		5.6		6.1		5.3		5.5	Var	TBD	Var	TBD
Total Cost		26.4		5.2		4.4		8.0		8.6		9.5		9.4		10.0	Var	TBD	Var	TBD

METHOD OF IMPLEMENTATION: Original Equipment Manufacturer (OEM) Field Teams.

CONTRACT DATE: CURRENT YEAR: MAY 95 BUD YR 1: MAY 96 BUD YR 2: MAY 97 BUD YR 3: MAY 98 BUD YR 4: MAY 99 BUD YR 5: MAY 00 BUD YR 6: MAY 01

PRODUCTION DELIVERY DATE: CURRENT YEAR: AUG 96 BUD YR 1: AUG 97 BUD YR 2: AUG 98 BUD YR 3: AUG 99 BUD YR 4: AUG 00 BUD YR 5: AUG 01 BUD YR 6: AUG 02

INSTALLATION SCHEDULE:	FY 96				FY 97				FY 98				FY 99				TC		TOTAL	
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4				
INPUT	~~~~~	~~~~~	~~~~~	~~~~~	~~~~~	~~~~~	~~~~~	~~~~~	~~~~~	~~~~~	~~~~~	~~~~~	~~~~~	~~~~~	~~~~~	~~~~~	~~~~~	~~~~~	~~~~~	~~~~~
FY 1996 AND PRIOR				VAR															VAR	
FY 1997								VAR											VAR	
FY 1998												VAR							VAR	
FY 1999																VAR			VAR	
OUTPUT	~~~~~	~~~~~	~~~~~	~~~~~	~~~~~	~~~~~	~~~~~	~~~~~	~~~~~	~~~~~	~~~~~	~~~~~	~~~~~	~~~~~	~~~~~	~~~~~	~~~~~	~~~~~	~~~~~	~~~~~
FY 1996 AND PRIOR	VAR	VAR	VAR	VAR															VAR	
FY 1997					VAR	VAR	VAR	VAR											VAR	
FY 1998									VAR	VAR	VAR	VAR							VAR	
FY 1999													VAR	VAR	VAR	VAR			VAR	

MODIFICATION OF WEAPON SYSTEM

Date February 1997

MODIFICATION TITLE: AEGIS WEAPON SYSTEM SHIP ALTERATIONS (AWS SHIPALTS)
MODELS OF SYSTEMS AFFECTED: AEGIS WEAPONS SYSTEM
DESCRIPTION/JUSTIFICATION: MISCELLANEOUS AEGIS WEAPONS SYSTEM SHIPALTS (CG/DDG). This program provides for procurement and installation of emerging fact-of-life, and safety modifications to the AEGIS Weapon System (AWS), including alterations which are prerequisite to AWS interoperability/compatability with other systems (TBMD/JTIDS/CEC/Tomahawk). These requirements will continue through the life of the ships. These SHIPALTS vary in scope and will be installed primarily by Alteration Installation Teams and Public or Private Shipyards.

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES																					
FINANCIAL PLAN: (\$M)																					
		FY 96 & PRIOR		FY 97		FY 98		FY 99		FY 00		FY 01		FY 02		FY 03		TO COMPLETE		TOTAL	
		Qty	\$M	Qty	\$M	Qty	\$M	Qty	\$M	Qty	\$M	Qty	\$M	Qty	\$M	Qty	\$M	Qty	\$M	Qty	\$M
RDT&E:																					
PROCUREMENT:																					
Kit quantity																					
Installation Kits																					
Installation Kits Nonrecurring																					
Equipment																					
Equipment Nonrecurring																					
Engineering Change Orders																					
Data																					
Training Equipment																					
Support Equipment																					
Other																					
Interim Contractor Support																					

* Equipment procured for new construction (SCN), but not installed before OWLD.

METHOD OF IMPLEMENTATION: Installation will be accomplished primarily by AIT teams.

CONTRACT DATE: BUD YR 2: DEC 96 BUD YR 3: DEC 97 BUD YR 4: DEC 98 BUD YR 5: DEC 99 BUD YR 6: DEC 00

INSTALLATION SCHEDULE:		FY 97				FY 98				FY 99				FY 00				TC		TOTAL	
INPUT		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4				
Non-OPN Procurements		VAR	VAR	VAR			VAR	VAR	VAR												
FY 1997																					
FY 1998										VAR	VAR	VAR				VAR	VAR	VAR			VAR
FY 1999																					
OUTPUT		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4				
Non-OPN Procurements				VAR	VAR	VAR															
FY 1997								VAR	VAR	VAR											
FY 1998											VAR	VAR		VAR							
FY 1999																VAR	VAR	VAR		VAR	VAR

MODIFICATION OF WEAPON SYSTEM

Date: February 1997

MODIFICATION TITLE: AEGIS WEAPON SYSTEM, DESIGN SERVICE ALLOCATION (DSA)
MODELS OF SYSTEMS AFFECTED: AEGIS WEAPONS SYSTEM
DESCRIPTION/JUSTIFICATION: This funds the planning yards to develop work packages to support the upgrades procured by this account.

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES:

FINANCIAL PLAN: (\$M)	FY 96 & PRIOR		FY 97		FY 98		FY 99		FY 00		FY 01		FY 02		FY 03		TO COMPLETE		TOTAL	
	Qty	\$M	Qty	\$M	Qty	\$M	Qty	\$M	Qty	\$M	Qty	\$M	Qty	\$M	Qty	\$M	Qty	\$M	Qty	\$M
RDT&E																				
PROCUREMENT:																				
Installation of Hardware	Qty	\$M	Qty	\$M	Qty	\$M	Qty	\$M	Qty	\$M	Qty	\$M	Qty	\$M	Qty	\$M	Qty	\$M	Qty	\$M
FY 98 (Var Kits)					Var	4.2													Var	4.2
FY 99 (Var Kits)							Var	6.8											Var	6.8
FY 00 (Var Kits)									Var	4.0									Var	4.0
FY 01 (Var Kits)											Var	5.4							Var	5.4
FY 02 (Var Kits)													Var	4.2					Var	4.2
FY 03 (Var Kits)															Var	6.7			Var	6.7
TC (TBD Kits)																	Var	TBD	Var	TBD
Total Installation Cost					Var	4.2	Var	6.8	Var	4.0	Var	5.4	Var	4.2	Var	6.7	Var	TBD	Var	TBD
Total Procurement Cost																				
TOTAL COST					Var	4.2	Var	6.8	Var	4.0	Var	5.4	Var	4.2	Var	6.7	Var	TBD	Var	TBD

METHOD OF IMPLEMENTATION:	Original Equipment Manufacturer (OEM) Field Teams.																			
CONTRACT DATE:	CURRENT YEAR: MAY 95				BUD YR 1: MAY 96				BUD YR 2: MAY 97				BUD YR 3: MAY 98				BUD YR 4: MAY 99			
PRODUCTION DELIVERY DATE:	CURRENT YEAR: AUG 96				BUD YR 1: AUG 97				BUD YR 2: AUG 98				BUD YR 3: AUG 99				BUD YR 4: AUG 00			
																	BUD YR 5: MAY 01			
																	BUD YR 5: AUG 01			
																	BUD YR 6: MAY 02			
																	BUD YR 6: AUG 02			

INSTALLATION SCHEDULE: OUTPUT	FY 98				FY 99				FY 00				FY 01				TC		TOTAL	
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4				
FY 1998	VAR	VAR	VAR	VAR															VAR	
FY 1999					VAR	VAR	VAR	VAR											VAR	
FY 2000									VAR	VAR	VAR	VAR							VAR	
FY 2001													VAR	VAR	VAR	VAR			VAR	

TIME PHASED SCHEDULE		A. APPROPRIATION/BUDGET ACTIVITY: OPN/BA - 4								B. P-1 ITEM NOMENCLATURE: AN/UYK - 43, LoBoy for B/L 3												C. DATE: February 1997					
		FY 1996				FY 1997				FY 1998				FY 1999				FY 2000				FY 2001				LATER	
		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4		
ACTIVE FORCE DRIVEN	(P)			5				5				5			5	4		4									
	(P)																										
SCHOOLS/OTHER TRAINING	(P)																										
	(P)																										
OTHER	(P)																										
TOTAL PHASE REQ	(C)			5	5	5	5	10	10	10	10	15	15	15	20	24	24	28								28	
ASSETS ON HAND	(BP)																										
DELIVERY FY 96 & PRIOR (20	(P)			5	10				5																		
				M-2																							
FY 97	(P)															4	4										
FY 98	(P)																										
FY 99	(P)																										
	(P)																										
	(P)																										
TOTAL ASSETS	(C)			5	15	15	15	15	20	20	20	20	20	20	20	24	28	28								28	
QTY OVER (+) OR SHORT (-)				0	+10	+10	+10	+5	+10	+10	+10	+5	+5	+5	0	0	+4	0								0	
D. REMARKS CG 64 ROH being rescheduled to accomodate this installation schedule.									E.				TOTAL		INSTALLED		ON HAND		FY 96 & PRIOR		UNFUNDED						
									RQMT (QTY)				RQMT						UNDELIVERED								
									1. APPN OPN				28		0		0		28		0						
									2. APPN																		
									3. PROCUREMENT LEADTIME				ADMIN 3 MONTHS				INITIAL 33 MONTHS				REORDER 33 MONTHS						

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EXHIBIT P-23

TIME PHASED REQUIREMENTS SCHEDULE

DATE: February 1997

(Supplement Sheet - Installation Data)

APPROPRIATION/BUDGET ACTIVITY								P-1 ITEM NOMENCLATURE: AN/UYK-43 LoBoys for B/L 3							
OPN/BA - 4															
1ST QTR		2ND QTR		3RD QTR		4TH QTR		1ST QTR		2ND QTR		3RD QTR		4TH QTR	
E.I./L	QTY	E.I./L	QTY	E.I./L	QTY	E.I./L	QTY	E.I./L	QTY	E.I./L	QTY	E.I./L	QTY	E.I./L	QTY
FY 1996								FY 1997							
				CG 61	5							CG 62	5		
FY 1998								FY 1999							
				CG 60	5					CG 63	5	CG 59	4		

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EXHIBIT P-23a

TIME PHASED SCHEDULE				A. APPROPRIATION/BUDGET ACTIVITY: OPN/BA - 4								B. P-1 ITEM NOMENCLATURE: CG Baseline 3 SHIPALT 24, 345/901, 379, 902,904, 905, LESS UYK-43 LoBoys for B/L 3												C. DATE: February 1997																			
				FY 1996				FY 1997				FY 1998				FY 1999				FY 2000				FY 2001				LATER															
				1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4																
ACTIVE FORCE DRIVEN (P)						1				1				1			1			1																							
(P)																																											
SCHOOLS/OTHER TRAINING (P)																																											
(P)																																											
OTHER (P)																																											
TOTAL PHASE REQ (C)						1	1	1	1	2	2	2	2	3	3	3	4	5	5	6								6															
ASSETS ON HAND (BP)																																											
DELIVERY FY 96 & PRIOR(6) (P)						1	2				1							1	1																								
FY 97 (P)						M-2																																					
FY 98 (P)																																											
FY 99 (P)																																											
TOTAL ASSETS (C)						1	3	3	3	3	4	4	4	4	4	4	4	5	6	6								6															
QTY OVER (+) OR SHORT (-)						0	+2	+2	+2	+1	+2	+2	+2	+1	+1	+1	0	0	+1	0								0															
D. REMARKS												E.				TOTAL RQMT				INSTALLED				ON HAND				FY 96 & PRIOR UNDELIVERED				UNFUNDED											
												RQMT (QTY)																															
												1. APPN OPN								6								0				0				6				0			
												2. APPN																															
CG 64 ROH being rescheduled to accomodate this installation schedule.												3. PROCUREMENT LEAD-TIME								ADMIN 3 MONTHS								INITIAL 33 MONTHS								REORDER 33 MONTHS							

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EXHIBIT P-23

TIME PHASED REQUIREMENTS SCHEDULE

DATE: February 1997

(Supplement Sheet - Installation Data)

APPROPRIATION/BUDGET ACTIVITY								P-1 ITEM NOMENCLATURE:							
OPN/BA - 4								SHIPALT 24, 345/901, 902, 904, 905, LESS AN/UYK-43 LoBoys for B/L 3							
1ST QTR		2ND QTR		3RD QTR		4TH QTR		1ST QTR		2ND QTR		3RD QTR		4TH QTR	
E.I./L	QTY	E.I./L	QTY	E.I./L	QTY	E.I./L	QTY	E.I./L	QTY	E.I./L	QTY	E.I./L	QTY	E.I./L	QTY
FY 1996								FY 1997							
				CG 61	1							CG 62	1		
FY 1998								FY 1999							
				CG 60	1					CG 63	1	CG 59	1		

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EXHIBIT P-23a

CLASSIFICATION: **UNCLASSIFIED**

BUDGET ITEM JUSTIFICATION SHEET P-40						DATE: February 1997		
APPROPRIATION/BUDGET ACTIVITY Other Procurement, Navy BA4/Ordnance Support Equipment					P-1 ITEM NOMENCLATURE Surface Tomahawk Support Equipment (J45A) (PEO(CU)) (BLI: 525000)			
	FY 1996	FY 1997	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003
QUANTITY	-	-	-	-	-	-	-	-
COST (In Millions)	\$63.7	\$83.8	\$65.5	\$94.8	\$82.0	\$74.7	\$55.1	\$56.3
<p>Afloat Planning System (APS) provides Tomahawk Land Attack Missile (TLAM) mission planning capability to US Navy Battle Force and Battle Group Commanders. Installations are planned for CV/CVNs and two APS support facilities. APS consists of three segments: (a) TLAM Planning system (TPS) which plans conventional TLAM routes; (b) Digital Imagery Workstation Afloat (DIWSA) which processes required imagery data and (c) Tactical Data Distribution System (TDDS) which is the communications link with incoming threat, weather and imagery data, and outgoing TLAM missions sent to Tomahawk platforms. Total IO/Requirement for APS is 18.</p> <p>Advanced Tomahawk Weapons Control System (ATWCS) procures hardware and software reliability, maintainability and safety changes to correct Tomahawk Weapon Systems (TWS) deficiencies, TWS upgrades resulting from RDT&E initiated improvements, operational requirements, Desert Storm lessons learned, fleet systems reviews, and Land Base Test Site (LBTS) testing. This element funds the procurement of ATWCS which provides state-of-the-art open system architecture, greater graphical display, improved interface, increased mission storage capacity, improved flexibility and responsiveness.</p> <p>Installation of Equipment funds all Fleet Modernization Program (FMP) installation costs associated with ATWCS and all non-FMP installation costs associated with APS and shore-sited units of both systems.</p> <p>Theater Mission Planning Center (TMPC) Product Improvements procures required software improvements. Tomahawk mission planning is highly dependent on mapping, charting and geodesy products from Defense Mapping Agency (DMA) and imagery from national systems. Transmitting the missions to Tomahawk capable platforms depends entirely on the Navy communications system which historically is improved and updated on a regular basis, many annually. This funding allows TMPC to retain compatibility with, and exploit capabilities of, these systems.</p> <p>The FY98 program procures 22 ATWCS units, TMPC product improvements and associated systems support costs. The FY99 program procures 28 ATWCS units, TMPC product improvements and associated systems support costs.</p> <p>Budget reflects the transfer of design services into the appropriate equipment P-1 line item beginning in FY 1998.</p>								

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CLASSIFICATION:

UNCLASSIFIED

CLASSIFICATION: **UNCLASSIFIED**

WEAPONS SYSTEM COST ANALYSIS									DATE:	
P-5									February 1997	
APPROPRIATION/BUDGET ACTIVITY				P-1 ITEM NOMENCLATURE/SUBHEAD						
Other Procurement, Navy BA4/Ordnance Support Equipment				Surface Tomahawk Support Equipment (J45A) (PEO(CU)) (BLI: 525000)						
COST CODE	ELEMENT OF COST	IDENT CODE	TOTAL COST IN THOUSANDS OF DOLLARS							
			FY 1996		FY 1997		FY 1998		FY 1999	
			QTY	TOTAL COST	QTY	TOTAL COST	QTY	TOTAL COST	QTY	TOTAL COST
03000	<u>Weapon Control System</u>	A	4	20,931	2	10,000				
06000	Afloat Planning System (APS)									
	Advanced Tomahawk Weapons Control									
	System (ATWCS)	N/A		27,064		52,350		30,756		39,949
07000	Installation of Equipment (Non-FMP)	N/A		2,116		2,619		1,499		0
07001	installation of Equipment (FMP)	N/A		538		2,594		4,300		8,060
07002	Design Service Agent (FMP Install)	N/A		0		0		604		1,327
08000	Theater Mission Planning Center (TMPC)									
	Product Improvements	N/A		13,026		16,222		28,343		45,428
					</					

UNCLASSIFIED

CLASSIFICATION:

UNCLASSIFIED

BUDGET PROCUREMENT HISTORY AND PLANNING EXHIBIT (P-5A)									A. DATE February 1997	
B. APPROPRIATION/BUDGET ACTIVITY Other Procurement, Navy BA4/Ordnance Support Equipment				C. P-1 ITEM NOMENCLATURE Surface Tomahawk Support Equipment (PEO(CU)) (BLI: 525000)				SUBHEAD J45A		
Cost Element/ FISCAL YEAR	CONTRACTOR AND LOCATION	CONTRACT METHOD & TYPE	CONTRACTED BY	AWARD DATE	DATE OF FIRST DELIVERY	QUANTITY	UNIT COST (000)	SPECS AVAILABLE NOW	SPEC REV REQ'D	IF YES WHEN AVAILABLE
Afloat Planning System 03000/FY96	GD/E, San Diego CA	SS/Option	NAVSUP	Jun 96	Aug 97	4	5,233	Yes	No	
03000/FY97	GD/E, San Diego CA	SS/Option	NAVSUP	Jan 97	Mar 98	2	5,000	Yes	No	
D. REMARKS Procurements are sole source due to unique capabilities of these vendors to produce the equipment indicated.										

UNCLASSIFIED

CLASSIFICATION:

UNCLASSIFIED

MODIFICATION INSTALLATION SUMARY (EXHIBIT P-3N) (TOA, Dollars in Millions)							DATE February 1997		
APPROPRIATION/BUDGET ACTIVITY: Other Procurement, Navy BA4/Ordnance Support Equipment					P-1 ITEM NOMENCLATURE Surface Tomahawk Support Equipment (J45A) (PEO(CU)) (BLI: 525000)(PEO(CU)) (BLI: 525000)				
System/Modification	FY 1996	FY 1997	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	TOTAL
Advanced Tomahawk Weapons Control System	0.5	4.1	5.9	9.4	7.8	7.4	7.2	0.0	42.3
Afloat Planning System	2.1	1.1	0.6	0.0	0.0	0.0	0.0	0.0	3.8
				</					

P-1 SHOPPING LIST

ITEM NO. 156

PAGE NO. 4

CLASSIFICATION:

UNCLASSIFIED

P3A		INDIVIDUAL MODIFICATION																													
MODIFICATION TITLE:		Advanced Tomahawk Weapons Control System (ATWCS)																													
MODELS OF SYSTEM AFFECTED:		CGs/DDs/DDGs/CVs/CVNs/LCCs/AGFs																													
DESCRIPTION/JUSTIFICATION:		ATWCS provides state-of-the-art open system architecture, greater graphical display, improved interface, mission storage capacity, flexibility and responsiveness over the previous Tomahawk Weapons Control System configuration.																													
DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES:																															
		FY 1996 & Prior		FY 1997		FY 1998		FY 1999		FY 2000		FY 2001		FY 2002		FY 2003		TC		TOTAL											
		QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$										
FINANCIAL PLAN (IN MILLIONS)																															
RDT&E																				0	0.0										
PROCUREMENT																				161	216.9										
INSTALLATION KITS		28	62.5	29	45.6	22	24.0	28	30.8	34	33.5	20	20.5	0	0.0	0	0.0	0	0.0	161	216.9										
INSTALLATION KITS (UNIT COST)			2.232		1.572		1.091		1.100		0.985		1.025		0.000		0.000		0.000												
INSTALLATION KITS NONRECURRING EQUIPMENT																				0.0	0.0										
EQUIPMENT NONRECURRING																				0.0	0.0										
ENGINEERING CHANGE ORDERS																				0.0	0.0										
DATA																				0.0	0.0										
TRAINING EQUIPMENT																				0.0	0.0										
SUPPORT EQUIPMENT																				0.0	0.0										
OTHER (Engineering Support)			26.3		6.7		6.8		9.1		9.2		18.9		18.9		26.5		0.0		122.4										
INTERIM CONTRACTOR SUPPORT																				0.0	0.0										
INSTALLATION OF HARDWARE																															
FY 1996 EQUIPMENT & PRIOR (28 KITS)		5	0.7	14	4.1	9	3.0													28	7.8										
FY 1997 EQUIPMENT (29 KITS)						10	2.9	19	4.4											29	7.3										
FY 1998 EQUIPMENT (22 KITS)								21	5.0	1	0.5									22	5.5										
FY 1999 EQUIPMENT (28 KITS)										28	7.3									28	7.3										
FY 2000 EQUIPMENT (54 KITS)												34	7.4							34	7.4										
FY 2001 EQUIPMENT														20	7.2					20	7.2										
FY 2002 EQUIPMENT																0	0.0			0	0.0										
FY 2003 EQUIPMENT																		0	0.0	0	0.0										
TO COMPLETE																				0	0.0										
TOTAL INSTALLATION COST		5	0.7	14	4.1	19	5.9	40	9.4	29	7.8	34	7.4	20	7.2	0	0.0	0	0.0	161	42.5										
TOTAL PROCUREMENT COST		28	89.5	29	56.4	22	36.7	28	49.3	34	50.5	20	46.8	0	26.1	0	26.5	0	0.0	161	381.8										
TOTAL COST			89.5		56.4		36.7		49.3		50.5		46.8		26.1		26.5		0.0		381.8										
METHOD OF IMPLEMENTATION:		FMP/Alteration Installation Team (AIT)										ADMINISTRATIVE LEADTIME:					6 months					PRODUCTION LEADTIME:					12 months				
CONTRACT DATE:		FY 1997: Mar-97										FY 1998: Mar-98					FY 1999: Mar-99														
PRODUCTION DELIVER DATE:		FY 1997: Multiple										FY 1998: Multiple					FY 1999: Multiple														

CLASSIFICATION: UNCLASSIFIED

P3A (Continued)

INDIVIDUAL MODIFICATION (Continued)

MODIFICATION TITLE: [Advanced Tomahawk Weapons Control System \(ATWCS\)](#)

INSTALLATION SCHEDULE:

INPUT ==>	FY 1996 & Prior	FY 1997				FY 1998				FY 1999				FY 2000				FY 2001				FY 2002				FY 2003				TC	TOTAL
		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1					
FY 1996 & Prior	10	3	5	6	3	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	28				
FY 1997	0	0	0	0	0	0	6	6	7	10	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	29				
FY 1998	0	0	0	0	0	0	0	0	0	0	8	7	3	4	0	0	0	0	0	0	0	0	0	0	0	0	22				
FY 1999	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6	10	6	6	0	0	0	0	0	0	0	0	28				
FY 2000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	8	10	8	8	0	0	0	0	34				
FY 2001	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	8	8	4	0	20				
FY 2002	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
FY 2003	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
To Complete	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
161																															
OUTPUT ==>	FY 1996 & Prior	FY 1997				FY 1998				FY 1999				FY 2000				FY 2001				FY 2002				FY 2003				TC	TOTAL
		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1					
FY 1996 & Prior	5	2	7	4	1	4	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	28				
FY 1997	0	0	0	0	0	0	2	5	3	19	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	29				
FY 1998	0	0	0	0	0	0	0	0	0	0	8	11	2	1	0	0	0	0	0	0	0	0	0	0	0	0	22				
FY 1999	0	0	0	0	0	0	0	0	0	0	0	0	0	2	4	16	6	0	0	0	0	0	0	0	0	0	28				
FY 2000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	16	8	8	0	0	0	0	0	34				
FY 2001	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4	6	4	6	0	20				
FY 2002	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
FY 2003	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
To Complete	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
161																															
P-3A																															

CLASSIFICATION: UNCLASSIFIED

P3A		INDIVIDUAL MODIFICATION																					
MODIFICATION TITLE:		Afloat Planning System (APS)																					
MODELS OF SYSTEM AFFECTED:		CVs/CVNs																					
DESCRIPTION/JUSTIFICATION:		Afloat Planning System provides Tomahawk Land Attack Missile (TLAM) mission planning capability to US Navy Battle Force and Battle Group Commanders.																					
DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES:																							
		FY 1996 & Prior		FY 1997		FY 1998		FY 1999		FY 2000		FY 2001		FY 2002		FY 2003		TC		TOTAL			
		QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$		
FINANCIAL PLAN (IN MILLIONS)																							
RDT&E		2	4.8																	2	4.8		
PROCUREMENT																							
INSTALLATION KITS		11	49.2	2	8.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	3	14.2	16	71.4		
INSTALLATION KITS (UNIT COST)			4.473		4.000		0.000		0.000		0.000		0.000		0.000		0.000		4.733				
INSTALLATION KITS NONRECURRING																							
EQUIPMENT																							
EQUIPMENT NONRECURRING																							
ENGINEERING CHANGE ORDERS																							
DATA																							
TRAINING EQUIPMENT																							
SUPPORT EQUIPMENT																							
OTHER (Engineering Support)			11.2		2.0		0.0		0.0		0.0		0.0		0.0		0.0		9.0		22.2		
INTERIM CONTRACTOR SUPPORT																							
INSTALLATION OF HARDWARE																							
FY 1996 EQUIPMENT & PRIOR (13 KITS)		9	5.5	4	1.1															13	6.6		
FY 1997 EQUIPMENT (2 KITS)						2	0.6															2	0.6
FY 1998 EQUIPMENT																							
FY 1999 EQUIPMENT																							
FY 2000 EQUIPMENT																							
FY 2001 EQUIPMENT																							
FY 2002 EQUIPMENT																							
FY 2003 EQUIPMENT																							
TO COMPLETE (5 KITS)																		3		3	0.0		
TOTAL INSTALLATION COST		9	5.5	4	1.1	2	0.6	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	3	0.0	18	7.2		
TOTAL PROCUREMENT COST		11	65.9	2	11.1	0	0.6	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	3	23.2	16	100.8		
TOTAL COST			70.7		11.1		0.6		0.0		0.0		0.0		0.0		0.0		23.2		105.6		
METHOD OF IMPLEMENTATION:		Alteration Installation Team (AIT)				ADMINISTRATIVE LEADTIME:				9 months				PRODUCTION LEADTIME:				14 months					
CONTRACT DATE:		FY 1997: JAN 97				FY 1998: N/A				FY 1999: N/A													
PRODUCTION DELIVER DATE:		FY 1997: MAR 98				FY 1998: N/A				FY 1999: N/A													
NOTE: 2 RDT&E funded units were productionized and installed for active fleet use with OPN funds.																							
The total program quantity of 18 units reflects the inventory objective for this item.																							

P-3A

CLASSIFICATION: **UNCLASSIFIED**

P3A (Continued)

INDIVIDUAL MODIFICATION (Continued)

MODIFICATION TITLE: Afloat Planning System (APS)

INSTALLATION SCHEDULE:

INPUT ==>	FY 1996	FY 1997				FY 1998				FY 1999				FY 2000				FY 2001				FY 2002				FY 2003				TC	TOTAL
	& Prior	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4		
FY 1996 & Prior	9	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	13		
FY 1997	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2		
FY 1998	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
FY 1999	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
FY 2000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
FY 2001	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
FY 2002	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
FY 2003	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
To Complete	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	3			

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OUTPUT ==>	FY 1996	FY 1997				FY 1998				FY 1999				FY 2000				FY 2001				FY 2002				FY 2003				TC	TOTAL
	& Prior	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4		
FY 1996 & Prior	9	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	13		
FY 1997	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2		
FY 1998	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
FY 1999	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
FY 2000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
FY 2001	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
FY 2002	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
FY 2003	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
To Complete	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	3			

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CLASSIFICATION:

UNCLASSIFIED

TIME PHASED REQUIREMENT SCHEDULE P-23				A. APPROPRIATION/BUDGET ACTIVITY Other Procurement, Navy BA4/Ordnance Support Equipment								B. P-1 ITEM NOMENCLATURE Surface Tomahawk Support Equipment (J45A) (PEO(CU)) (BLI: 525000) ATWCS								C. DATE February 1997								
				FY 1997				FY 1998				FY 1999				FY 2000				FY 2001				FY 2002				LATER
				1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	
ACTIVE FORCE INVENTORY (P)				0	2	4	0	4	2	5	3	19	8	11	2	3	4	16	6	2	16	8	8	4	6	4	6	0
SCHOOLS/OTHER TRAINING (P)				2	5	0	1	0	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
OTHER (P)																												
TOTAL PHASED REQ (C)				2	9	13	14	18	25	30	33	52	60	71	73	76	80	96	102	104	120	128	136	140	146	150	156	0
ASSETS ON HAND (BP)				5																								
DELIVERY FY 96 & PRIOR (P)				3	5	6	3	1																				
FY 96 & PRIOR (P)																												
FY 97 (P)									6	6	7	10																
FY 98 (P)												8	7	3	4													
FY 99 (P)																6	10	6	6									
FY 00 (P)																				8	10	8	8					
FY 01 (P)																								8	8	4		
TOTAL ASSETS (C)				8	13	19	22	23	29	35	42	52	60	67	70	74	80	90	96	102	110	120	128	136	144	152	156	0
QTY OVER (+) OR SHORT (-)				+6	+4	+6	+8	+5	+4	+5	+9	0	0	-4	-3	-2	0	-6	-6	-2	-10	-8	-8	-4	-2	+2	0	0
D. REMARKS Delivery and installation of 5 units was completed during FY96 and prior.				E. RQMT (QTY)								TOTAL RQMT				INSTALLED		ON HAND AS OF 7/1 /96		FY 99 & PRIOR UNDELIVERED				UNFUNDED				
				1. APPN - 1810 (OP,N)								161				5		5		97				54				
				2. APPN -																								
				3. PROCUREMENT LEADTIME								ADMIN 6 months				INITIAL ORDER 12 months				REORDER 12 months								

DD for 2447, JUN 86

P-1 SHOPPING LIST

CLASSIFICATION:

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CLASSIFICATION:

UNCLASSIFIED

TIME PHASED REQUIREMENTS SCHEDULE (SUPPLEMENT SHEET-INSTALLATION DATA) P-23A												DATE February 1997			
APPROPRIATION/BUDGET ACTIVITY Other Procurement, Navy BA4/Ordnance Support Equipment								P-1 ITEM NOMENCLATURE/PROJECT UNIT Surface Tomahawk Support Equipment (J45A) (PEO(CU)) (BLI: 525000) ATWCS							
1ST QTR		2ND QTR		3RD QTR		4TH QTR		1ST QTR		2ND QTR		3RD QTR		4TH QTR	
E.I./L	QTY	E.I./L	QTY	E.I./L	QTY	E.I./L	QTY	E.I./L	QTY	E.I./L	QTY	E.I./L	QTY	E.I./L	QTY
FY 1997								FY 1998							
SWEF LAD	1 1	ICSTF DD980 DDG58 SWEF KPT DD	1 1 1 1 2 1	DDG51 CG62 DD992	1 1 2	ICSTF	1	CG70 DDG62 DDG55 CG66	1 1 1 1	CG69 DDG54 LANT ACSC PAC	1 1 2 1 2	CG73 CG60 DD973 DDG64	1 1 2 1	DDG52 DDG64	2 1
FY 1999								FY 2000							
DD991 DDG59 CG67 CG54 DD975 DDG60 CG63 CG56 DD985 CG68	2 2 2 1 2 2 2 2 2 2	CG59 DD978 DDG61 DD964	2 2 2 2	CG65 DDG55 CG64 DD963 DDG63 CG58	2 1 2 2 2 2	DDG53	2	DDG70 CG53	1 2	DDG56 CG62	2 2	DD981 DD968 CG60 DD980 CG72 DDG65 CG73 DD987	2 2 2 2 2 2 2 2	CG57 DDG71 DD965	2 2 2

P-1 SHOPPING LIST

CLASSIFICATION:

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UNCLASSIFIED

CLASSIFICATION:

UNCLASSIFIED

[illegible]

P-1 SHOPPING LIST

CLASSIFICATION:

ITEM NO. 156 PAGE NO. 8a

UNCLASSIFIED

CLASSIFICATION: **UNCLASSIFIED**

BUDGET ITEM JUSTIFICATION SHEET P-40					DATE: February 1997			
APPROPRIATION/BUDGET ACTIVITY Other Procurement, Navy BA4/Ordnance Support Equipment					P-1 ITEM NOMENCLATURE Submarine Tomahawk Support Equipment (J45B) (PEO(CU)) (BLI: 525500)			
	FY 1996	FY 1997	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003
QUANTITY	-	-	-	-	-	-	-	-
COST (In Millions)	\$1.3	\$0.0	\$1.4	\$4.1	\$6.0	\$7.6	\$8.0	\$6.6
<p>Submarine-Advanced Tomahawk Weapon Control System (Sub-ATWCS) provides open system architecture, extensive hardware (TAC-X processors, Common Display Console Unit, racks, cables, connectors, etc.), and software commonality with surface systems. Sub-ATWCS is a prerequisite for the Tomahawk Baseline Improvement Program in submarines.</p> <p>The FY 1998 and FY 1999 programs procure necessary hardware to accommodate commonality and interface requirements between Sub-ATWCS and the CCS-MK2 Fire Control Systems for Tomahawk capable class submarines. The increased funding during FY 1999 and out reflects the need to procure in greater numbers the multiple items of equipment identified above based on a time-phased requirements schedule.</p>								

P-1 SHOPPING LIST

CLASSIFICATION:

UNCLASSIFIED

CLASSIFICATION: **UNCLASSIFIED**

WEAPONS SYSTEM COST ANALYSIS										DATE:	
P-5										February 1997	
APPROPRIATION/BUDGET ACTIVITY					P-1 ITEM NOMENCLATURE/SUBHEAD						
Other Procurement, Navy BA4/Ordnance Support Equipment					Submarine Tomahawk Support Equipment (J45B) (PEO(CU)) (BLI: 525500)						
COST CODE	ELEMENT OF COST	IDENT CODE	TOTAL COST IN THOUSANDS OF DOLLARS								
			FY 1996		FY 1997		FY 1998		FY 1999		
			QTY	TOTAL COST	QTY	TOTAL COST	QTY	TOTAL COST	QTY	TOTAL COST	
02000	Submarine-ATWCS	N/A		1,347		0		1,425		4,060	
				1,347		0		1,425		4,060	

UNCLASSIFIED

CLASSIFICATION:

UNCLASSIFIED

BUDGET ITEM JUSTIFICATION SHEET					DATE: February 1997			
APPROPRIATION/BUDGET ACTIVITY					P-1 ITEM NOMENCLATURE			
OTHER PROCUREMENT, NAVY/BA-4 ORDNANCE SUPPORT EQUIPMENT					VERTICAL LAUNCH SYSTEM (145A) - 5260			
	1996	1997	1998	1999	2000	2001	2002	2003
QUANTITY								
COST (In Millions)	\$9.2	\$12.7	\$7.6	\$7.1	\$6.5	\$4.2	\$7.1	\$7.3
<p>Funding in this line will be used to procure ORDALTS for Vertical Launch System (VLS)for Surface Combatant Ships, VLS Support, and Test and Handling Equipment for SSN-688 Class Submarines.</p> <p>The dollar breakout between the Surface and Submarine portions is as follows:</p>								
FISCAL YEAR	1996	1997	1998	1999	2000	2001	2002	2003
SURFACE VLS (EQUIP) (\$000)	\$4,237	\$5,410	\$2,866	\$451	\$515	\$156	\$159	\$163
SURFACE VLS (INSTAL) (\$000)	\$963	\$2,862	\$447	\$0	\$0	\$0	\$0	\$0
SUBTOTAL	\$5,200	\$8,272	\$3,313	\$451	\$515	\$156	\$159	\$163
SUB VLS (EQUIP)(\$000)	\$2,060	\$2,860	\$2,516	\$3,361	\$2,791	\$3,344	\$6,676	\$6,382
SUB VLS (INSTAL) (\$000)	\$1,914	\$1,536	\$1,762	\$3,276	\$3,212	\$721	\$289	\$721
SUBTOTAL	\$3,974	\$4,396	\$4,278	\$6,637	\$6,003	\$4,065	\$6,965	\$7,103
TOTAL (\$000)	\$9,174	\$12,668	\$7,591	\$7,088	\$6,518	\$4,221	\$7,124	\$7,266

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P-1 SHOPPING LIST
ITEM NO. 15 PAGE NO. 1

CLASSIFICATION:

UNCLASSIFIED

CLASSIFICATION: **UNCLASSIFIED**

BUDGET ITEM JUSTIFICATION SHEET		DATE:
P-40 (CONTINUED)		February 1997
APPROPRIATION/BUDGET ACTIVITY OTHER PROCUREMENT, NAVY/BA-4 ORDNANCE SUPPORT EQUIPMENT	P-1 ITEM NOMENCLATURE VERTICAL LAUNCH SYSTEM (145A) - 5260	
<p><u>SURFACE</u></p> <p>VERTICAL LAUNCHING SYSTEM - The Vertical Launching System (VLS) is a missile launching system for surface combatants, capable of launching missiles for all warfare areas and adaptable to present and future weapons control systems. OPN funds are for procurement of SPRUANCE (DD 963) Class ship sets (one 61-cell VLS launcher). Each VLS launcher holds 61 missiles with complete flexibility in missile loadout; any missile type adapted for Vertical Launch can be loaded/fired in any cell. Thus, any mix of TOMAHAWK Land-attack or Anti-ship missiles can be carried. This flexibility of loadout allows the ship's mission to be specifically tailored to its current operational requirements. The TOMAHAWK missiles are controlled by the TOMAHAWK Weapons Control System. The modular design of the VLS makes each module essentially a stand-alone missile launching system, greatly increasing system reliability and availability.</p> <p>VLS ORDALTS - Improvements/ changes required to resolve problems aboard the operational ships of the DD963, CG-47 and DDG-51 Class and OPN launchers in production.</p> <p>Present requirements are to provide two 61-cell launchers for CG-47 Class ships, one launcher for DD-963 Class ships, and one 61-cell and one 29-cell launcher for DDG-51 Class ships. Delivery of the VLS commenced in FY 85 for the CG-47 Class ships, in FY 86 for the DD-963 Class ships and in FY 87 for the DDG-51 Class Ships.</p> <p><u>SUBMARINES</u></p> <p>The SSN-688 Class Vertical Launch System (VLS) is a weapons system which provides the SSN-688 Class submarines with the capability to carry, status, preset, and launch up to twelve TOMAHAWK cruise missiles from vertical tubes located in the forward non-pressure hull area. This weapons system is being added to all SSN-688 Class submarines starting with the SSN-719 in FY 86 without degrading any existing SSN-688 Class weapons system capabilities or submarine operational characteristics. The VLS can launch two different types of TOMAHAWK cruise missiles: conventional land attack and conventional anti-ship. The TOMAHAWK cruise missile was modified to allow operation in a vertical orientation. VLS is being procured and installed under the SCN appropriation. VLS support, test, and handling equipment are provided by this OPN P-1 line item.</p>		

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CLASSIFICATION: **UNCLASSIFIED**

BUDGET ITEM JUSTIFICATION SHEET		DATE:
P-40 (CONTINUED)		February 1997
APPROPRIATION/BUDGET ACTIVITY	P-1 ITEM NOMENCLATURE	
OTHER PROCUREMENT, NAVY/BA-4		
ORDNANCE SUPPORT EQUIPMENT	VERTICAL LAUNCH SYSTEM (145A) - 5260	
SUBMARINES		
<p>The AUR Simulator is a test and training device that is loaded into a missile tube to simulate an operational Encapsulated TOMAHAWK Vertical All Up Round (AUR) allowing the VLS to be exercised through the launch phase without actually launching a missile. The AUR Simulator consists of an AUR Electronic Simulator enclosed in a Volumetric Shape. The AUR Electronic Simulator (AURES) simulates AUR operations either while installed in the operational AUR, provides a watertight, pressure-proof enclosure for the AURES, and interfaces with the missile tube in a manner similar to an operational AUR so that no damage to the tube will occur during simulation. The missile tube bore gauge is used to verify the proper missile tube clear bore to ensure compatibility with the TOMAHAWK AUR. The AUR loader is a funnel-shaped device which mounts to the missile tube muzzle face. It acts as a guide for the AUR and provides the mechanism to push the AUR down during loading and pull the AUR out of the missile tube during unloading. The Missile Tube Control Panel (MTCP) displays the status of the missile tubes, controls the operation of the missile tube hatches, and displays the status of various subsystems.</p> <p>With the exception of the MTCP which has been approved for full production (AFP), VLS support equipment is not expected to be used by the Fleet. Equipments will be utilized by new construction shipyards, development laboratories, primary support activities, squadron support tenders and SSN overhaul shipyards.</p> <p>The budget reflects the transfer of design services into the appropriate P-1 line item in accordance with full funding policy FY98 and out.</p>		

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WEAPON SYSTEM COST ANALYSIS EXHIBIT P-5									DATE: February 1997	
APPROPRIATION/BUDGET ACTIVITY OTHER PROCUREMENT, NAVY BA-4 ORDNANCE SUPPORT EQUIPMENT					P-1 ITEM NOMENCLATURE/SUBHEAD VERTICAL LAUNCH SYSTEM (145A) - 5260					
COST CODE	ELEMENT OF COST	IDENT CODE	TOTAL COST IN THOUSANDS OF DOLLARS							
			FY 1996		FY 1997		FY 1998		FY 1999	
			QTY	TOTAL COS	QTY	TOTAL COST	QTY	TOTAL COST	QTY	TOTAL COST
	SURFACE N86									
5A003	VLS ORDALTS			2,238		4,003		1,423		318
5A830	PRODUCTION ENGINEERING			1,577		1,002		1,245		108
5A870	SPEC TOOLING/TEST EQUIP			143		124		141		
5A900	CONSULTING SERVICES			279		281		57		25
5A5IN	FMP INSTALLATION			963		2,862		447		
	TOTAL			5,200		8,272		3,313		451

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WEAPON SYSTEM COST ANALYSIS EXHIBIT (P-5)										DATE: FEBRUARY 1997	
APPROPRIATION/BUDGET ACTIVITY OTHER PROCUREMENT, NAVY/BA-4						P-1 ITEM NOMENCLATURE/SUBHEAD SSN 688 CLASS VERTICAL LAUNCH SYSTEM/845A					
COST CODE	ELEMENT OF COST	IDENT CODE	TOTAL COST IN THOUSANDS OF DOLLARS								
				FY96		FY97		FY98		FY99	
			QTY	TOTAL COST	QTY	TOTAL COST	QTY	TOTAL COST	QTY	TOTAL COST	
	<u>SUBMARINES N-87</u>										
5A102	AUR ELECTRONIC SIMULATOR (AURES) ME	A	63	\$580	12	\$171	18	\$313	40	\$722	
5A107	LOADING SUPPORT EQUIPMENT	A		0		0		0	5	781	
5A116	FACILITY HARDWARE	A		131		0		256		1,123	
5A118	SHIPALT MATERIAL	A	9	1,349	12	2,689	13	1,947	6	735	
	MATERIAL TOTAL			\$2,060		\$2,860		\$2,516		\$3,361	
5AINS	FMP INSTALLATIONS			1,914		1,536		1,260		2,615	
5ADSA	DESIGN AGENT							502		\$661.00	
	INSTALLATION TOTAL			\$1,914		\$1,536		\$1,762		\$3,276	
	GRAND TOTAL			\$3,974		\$4,396		\$4,278		\$6,637	
			P-1 SHOPPING LIST			CLASSIFICATION:					
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CLASSIFICATION:

UNCLASSIFIED

BUDGET PROCUREMENT HISTORY AND PLANNING EXHIBIT P-5A										DATE: FEBRUARY 1997	
APPROPRIATION/BUDGET ACTIVITY OTHER PROCUREMENT, NAVY/BA-4						P-1 ITEM NOMENCLATURE/SUBHEAD SSN 688 CLASS VERTICAL LAUNCH SYSTEM/845A					
COST CODE	LINE ITEM/ FISCAL YEAR	CONTRACTOR AND LOCATION	CONTRACT METHOD & TYPE	CONTRACTED BY	AWARD DATE	DATE OF FIRST DELIVERY	QUANTITY	UNIT COST	SPECS AVAILABL NOW	SPEC REV REQ'D	IF YES WHEN AVAILABLE
5A102	AUR ELECTRONIC Simulator MK101										
	FY96 Remote Weapons Sel Kits	COMPETITIVE/NUWC	COMPET	NUWC	11/95	4/96	63	\$14,127	YES	NO	N/A
	FY97 Remote Weapons Sel Kits	COMPETITIVE/NUWC	COMPET	NUWC	11/96	4/97	12	\$14,284	YES	NO	N/A
	FY98 Remote Weapons Sel Kits	COMPETITIVE/NUWC	COMPET	NUWC	11/97	4/98	15	\$14,732	YES	NO	N/A
	Blk IV Kit	COMPETITIVE/NUWC	COMPET	NUWC	11/97	4/98	3	\$30,675	YES	NO	N/A
	FY99 Remote Weapons Sel Kits	COMPETITIVE/NUWC	COMPET	NUWC	11/98	4/99	30	\$14,848	YES	NO	N/A
	Blk IV Kit	COMPETITIVE/NUWC	COMPET	NUWC	11/98	4/99	10	\$27,656	YES	NO	N/A
	5A107	LOADING SUPPORT EQUIPMENT									
FY99 Platform Cradles	COMPETITIVE/NUWC	COMPET	NUWC	11/98	4/99	5	\$156,200	YES	NO	N/A	
REMARKS:											

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CLASSIFICATION:

EXHIBIT P-5A

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CLASSIFICATION:

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BUDGET PROCUREMENT HISTORY AND PLANNING EXHIBIT P-5A										DATE: FEBRUARY 1997	
APPROPRIATION/BUDGET ACTIVITY OTHER PROCUREMENT, NAVY/BA-4						P-1 ITEM NOMENCLATURE/SUBHEAD SSN 688 CLASS VERTICAL LAUNCH SYSTEM/845A					
COST CODE	LINE ITEM/ FISCAL YEAR	CONTRACTOR AND LOCATION	CONTRACT METHOD & TYPE	CONTRACTED BY	AWARD DATE	DATE OF FIRST DELIVERY	QUANTITY	UNIT COST	SPECS AVAILABL NOW	SPEC REV REQ'D	IF YES WHEN AVAILABLE
5A118	<u>SHIPALT MATERIAL</u>										
	<u>FY96</u>										
	Self Lubricated Bearings	COMPETITIVE/NUWC	COMPET	NUWC	11/95	4/96	3	\$45,000	YES	NO	N/A
	Tube Control Panel	COMPETITIVE/NUWC	COMPET	NUWC	11/95	4/96	6	\$324,333	YES	NO	N/A
	<u>FY97</u>										
	Self Lubricated Bearings	COMPETITIVE/NUWC	COMPET	NUWC	11/96	4/97	4	\$45,321	YES	NO	N/A
	Tube Control Panel	COMPETITIVE/NUWC	COMPET	NUWC	11/96	4/97	8	\$313,414	YES	NO	N/A
	<u>FY98</u>										
	Self Lubricated Bearings	COMPETITIVE/NUWC	COMPET	NUWC	11/97	4/98	7	\$48,714	YES	NO	N/A
	Tube Control Panel	COMPETITIVE/NUWC	COMPET	NUWC	11/97	4/98	4	\$344,878	YES	NO	N/A
	Access Plates	COMPETITIVE/NUWC	COMPET	NUWC	11/97	4/98	1	\$35,490	YES	NO	N/A
	Missile Tube Control Panel	COMPETITIVE/NUWC	COMPET	NUWC	11/97	4/98	1	\$191,000	YES	NO	N/A
<u>FY99</u>											
Self Lubricated Bearings	COMPETITIVE/NUWC	COMPET	NUWC	11/98	4/99	5	\$74,000	YES	NO	N/A	
Tube Control Panel	COMPETITIVE/NUWC	COMPET	NUWC	11/98	4/99	1	\$365,000	YES	NO	N/A	
REMARKS:											

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CLASSIFICATION:

EXHIBIT P-5A

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CLASSIFICATION: UNCLASSIFIED															INDIVIDUAL MODIFICATION		DATE: FEBRUARY 1997																																	
Vertical Launch Systems/845A																																																		
MODIFICATION TITLE: SELF LUBRICATED BEARINGS SHIPALT SSN 3936K (5A118)																																																		
MODELS OF SYSTEM AFFECTED:SSN 719-725, 750-773																																																		
DESCRIPTION/JUSTIFICATION: THIS MOD FIXED STUCK HATHCES DURING CYCLING AND MISSILE LAUNCH WITHOUT NEED FOR GREASING																																																		
DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES:																																																		
															FY96		TO		TO		TOTAL		TOTAL																											
															QTY & PRIOR QTY		FY97 QTY		FY98 QTY		FY99 QTY		FY00 QTY		FY01 QTY		FY02 QTY		FY03 QTY		COMP QTY		COMP COST		TOTAL QTY		TOTAL COST													
FINANCIAL PLAN (IN MILLIONS)																																																		
RD&E																																																		
PROCUREMENT															10		0.370		4		0.187		7		0.341		5		0.370		0		0.000		0		0.000		0		0.000		0		0.000					
QUANTITY															10				4				7				5														26		1.268							
INSTALLATION KITS																																											0		0.000					
INSTALLATION KITS NONRECURRING																																											0		0.000					
EQUIPMENT															10		0.370		4		0.187		7		0.341		5		0.370												26		1.268							
EQUIPMENT NONRECURRING																																									0		0.000							
ENGINEERING CHANGE ORDERS																																									0		0.000							
DATA																																									0		0.000							
TRAINING EQUIPMENT																																											0		0.000					
SUPPORT EQUIPMENT																																									0		0.000							
OTHER																																									0		0.000							
INTERIM CONTRACTOR SUPPORT																																									0		0.000							
INSTALLATION OF HARDWARE																																																		
FY96 EQUIPMENT AND PRIOR															7		2.063		3		0.472																						10		2.535					
FY97 EQUIPMENT																									4		0.088																4		0.088					
FY98 EQUIPMENT																											7		1.844														7		1.844					
FY99 EQUIPMENT																													5		2.152												5		2.152					
FY00 EQUIPMENT																																											0		0.000					
FY01 EQUIPMENT																																											0		0.000					
FY02 EQUIPMENT																																											0		0.000					
FY03 EQUIPMENT																																											0		0.000					
TO COMPLETE																																											0		0.000					
TOTAL INSTALLATION COST															7		2.063		3		0.472		4		0.088		7		1.844		5		2.152		0		0.000		0		0.000		0		0.000		26		6.619	
TOTAL PROCUREMENT COST																	0.370				0.187				0.341				0.370				0.000				0.000				0.000				0.000		1.268			
TOTAL COST																	2.433				0.659				0.429				2.214				2.152				0.000		0.000				0.000		0.000		7.887			
METHOD OF IMPLEMENTATION AIT																									ADMINISTRATIVE LEADTIME: 8 MONTHS										PRODUCTION LEADTIME: 12 MONTHS															
CONTRACT DATE:															PRIOR YEAR:		4/94		CURRENT YEAR:		4/96		BUDGET YEAR:		4/97		BUDGET YEAR 2:		4/98																					
PRODUCTION DELIVER DATE:															PRIOR YEAR:		2/95		CURRENT YEAR:		2/97		BUDGET YEAR:		2/98		BUDGET YEAR 2:		2/99																					
INSTALLATION SCHEDULE:																																																		
INPUT =====>															FY96		FY97		FY98		FY99		FY00		FY01		FY02		FY03		TC																			
															1,2,3,4		1,2,3,4		1,2,3,4		1,2,3,4		1,2,3,4		1,2,3,4		1,2,3,4		1,2,3,4		1,2,3,4																			
FY96 & PRIOR															2		4,1		3																								10							
FY97																					4																						4							
FY98																							2,3,2																		7									
FY99																									2,2,1																5									
FY00																																																		
FY01																																																		
FY02																																																		
FY03																																																		
OUTPUT =====>															FY96		FY97		FY98		FY99		FY00		FY01		FY02		FY03		TC																			
															1,2,3,4		1,2,3,4		1,2,3,4		1,2,3,4		1,2,3,4		1,2,3,4		1,2,3,4		1,2,3,4		1,2,3,4																			
FY96 & PRIOR															2		1,1, 1, 2		1, 2																								10							
FY97																					2,2																				4									
FY98																							1,2,2,2																		7									
FY99																									2,2,1																5									
FY00																																																		
FY01																																																		
FY02																																																		
FY03																																																		

CLASSIFICATION: UNCLASSIFIED

P3A																INDIVIDUAL MODIFICATION										DATE: FEBRUARY 1997																																
Vertical Launch Systems/845A																																																										
MODIFICATION TITLE: TUBE CONTROL PANEL UPGRADE SHIPALT SSN 3939 (5A118)																																																										
MODELS OF SYSTEM AFFECTED:SSN 751 - 773 PLUS TWO SHORE SITES																																																										
DESCRIPTION/JUSTIFICATION: THIS MOD FIXED THE FOLLOWING DEFICIENCIES: RESPONSE TIME DELAY; UNNECESSARY AUDIBLE ALARM WHILE TUBE IS EMPTY; POOR ACCESS TO AIR FILTERS; INABILITY TO KEEP AIR INTERNAL DIFFERENTIAL PRESSURE WITHIN SPECIFIED RANGE; DISPLAY OF DIFFERENTIAL PRESSURE ONLY WHEN SYSTEM IS IN "OPERATE" MODE																																																										
DEVELOPMENT STATUS:MAJOR DEVELOPMENT MILESTONES:																																																										
																								FY96		TO		TO		TOTAL		TOTAL																										
																								QTY & PRIOR	QTY	FY97	QTY	FY98	QTY	FY99	QTY	FY00	QTY	FY01	QTY	FY02	QTY	FY03	QTY	COMP	COMP	QTY	COST															
FINANCIAL PLAN (IN MILLIONS)																																																										
TOTAL																																																						0	0.000			
PROCUREMENT																														12	3.819	8	2.558	4	1.380	1	0.365	0	0.000	0	0.000	0	0.000	0	0.000	0	0.000	25	8.122									
QUANTITY																														12		8		4		1											25	0.000										
INSTALLATION KITS																																																						0	0.000			
INSTALLATION KITS NONRECURRING																																																						0	0.000			
EQUIPMENT (U9017)																														12	3.819	8	2.558	4	1.380	1	0.365																	25	8.122			
EQUIPMENT NONRECURRING																																																						0	0.000			
ENGINEERING CHANGE ORDERS																																																						0	0.000			
DATA																																																						0	0.000			
TRAINING EQUIPMENT																																																						0	0.000			
SUPPORT EQUIPMENT																																																						0	0.000			
OTHER (U9017)																																																						0	0.000			
INTERIM CONTRACTOR SUPPORT																																																						0	0.000			
INSTALLATION OF HARDWARE																																																										
FY96 EQUIPMENT AND PRIOR																														2		.405	10	1.053																	12	1.458						
FY97 EQUIPMENT																																			8	1.109																	8	1.109				
FY98 EQUIPMENT																																					4	0.771																	4	0.771		
FY99 EQUIPMENT																																							1	0.343																	1	0.343
FY00 EQUIPMENT																																																						0	0.000			
FY01 EQUIPMENT																																																						0	0.000			
FY02 EQUIPMENT																																																						0	0.000			
FY03 EQUIPMENT																																																						0	0.000			
TO COMPLETE																																																						0	0.000			
TOTAL INSTALLATION COST																														0.000	2	0.000	10	1.053	8	0.000	4	0.771	1	0.343	0	0.000	0	0.000	0	0.000	25	3.681										
TOTAL PROCUREMENT COST																														3.819		2.558		1.380		0.365		0.000		0.000		0.000		0.000		0.000		8.122										
TOTAL COST																														3.819		2.558		2.433		0.365		0.771		0.343		0.000		0.000		0.000		10.289										
METHOD OF IMPLEMENTATION AIT																																																										
ADMINISTRATIVE LEADTIME: 8 MONTHS																														PRODUCTION LEADTIME: 12 MONTHS																												
CONTRACT DATE: PRIOR YEAR: CURRENT YEAR: N/A BUDGET YEAR: 4/97 BUDGET YEAR 2:																																																										
PRODUCTION DELIVER DATE: PRIOR YEAR: CURRENT YEAR: N/A BUDGET YEAR: 2/98 BUDGET YEAR 2:																																																										
INSTALLATION SCHEDULE:																																																										
INPUT =====>																														FY96	FY97	FY98	FY99	FY00	FY01	FY02	FY03	TC																				
																														1,2,3,4	1,2,3,4	1,2,3,4	1,2,3,4	1,2,3,4	1,2,3,4	1,2,3,4	1,2,3,4	1,2,3,4	1,2,3,4																			
FY96 & PRIOR																															1,1,4	6		4,4												12												
FY97																																		4,4												8												
FY98																																			4											4												
FY99																																				1										1												
FY00																																																										
FY01																																																										
FY02																																																										
FY03																																																										
OUTPUT =====>																														FY96	FY97	FY98	FY99	FY00	FY01	FY02	FY03	TC																				
																														1,2,3,4	1,2,3,4	1,2,3,4	1,2,3,4	1,2,3,4	1,2,3,4	1,2,3,4	1,2,3,4	1,2,3,4	1,2,3,4																			
FY96 & PRIOR																															1, 1	2,2,3,3														12												
FY97																																																							8			
FY98																																																							4			
FY99																																																							1			
FY00																																																										
FY01																																																										
FY02																																																										
FY03																																																										

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EXHIBIT P-3A

CLASSIFICATION: UNCLASSIFIED

P3A														INDIVIDUAL MODIFICATION				DATE: FEBRUARY 1997			
Vertical Launch Systems/845A																					
MODIFICATION TITLE: MISSILE TUBE CONTROL PANEL																					
MODELS OF SYSTEM AFFECTED:SSN 719 - 725, 750																					
DESCRIPTION/JUSTIFICATION: THIS ALLOWS THE WEAPON DIFFERENTIAL PRESSURE TO BE MAINTAINED PER REQUIRED																					
SPECIFICATION OF VLS INTERFACE CONTROL DOCUMENT (ICD)																					
DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES:																					
FY96														TO	TO	TOTAL	TOTAL				
QTY & PRIOR QTY FY97 QTY FY98 QTY FY99 QTY FY00 QTY FY01 QTY FY02 QTY FY03														COMP	COMP	QTY	COST				
FINANCIAL PLAN (IN MILLIONS)																					
RDT&E																					
PROCUREMENT																					
0 0.000 0 0.000 1 0.191 0 0.000 7 0.471 0 0.000 0 0.000 0 0.000 0 0.000														8	0.662						
QUANTITY														0	0.000						
INSTALLATION KITS														0	0.000						
INSTALLATION KITS NONRECURRING														0	0.000						
EQUIPMENT (U9017)														8	0.662						
EQUIPMENT NONRECURRING														0	0.000						
ENGINEERING CHANGE ORDERS														0	0.000						
DATA														0	0.000						
TRAINING EQUIPMENT														0	0.000						
SUPPORT EQUIPMENT														0	0.000						
OTHER (U9017)														0	0.000						
INTERIM CONTRACTOR SUPPORT														0	0.000						
INSTALLATION OF HARDWARE																					
FY96 EQUIPMENT AND PRIOR																					
FY97 EQUIPMENT														0	0.000						
FY98 EQUIPMENT														1	0.000						
FY99 EQUIPMENT														0	0.000						
FY00 EQUIPMENT														7	0.347						
FY01 EQUIPMENT														0	0.000						
FY02 EQUIPMENT														0	0.000						
FY03 EQUIPMENT														0	0.000						
TO COMPLETE														0	0.000						
TOTAL INSTALLATION COST														8	0.387						
TOTAL PROCUREMENT COST														0.000	0.662						
TOTAL COST														0.000	1.049						
METHOD OF IMPLEMENTATION AIT																					
ADMINISTRATIVE LEADTIME: 8 MONTHS																					
PRODUCTION LEADTIME: 12 MONTHS																					
CONTRACT DATE: PRIOR YEAR: CURRENT YEAR: BUDGET YEAR: 4/98 BUDGET YEAR 2:																					
PRODUCTION DELIVER DATE: PRIOR YEAR: CURRENT YEAR: BUDGET YEAR: 2/99 BUDGET YEAR 2:																					
INSTALLATION SCHEDULE:																					
INPUT =====>																					
FY96 FY97 FY98 FY99 FY00 FY01 FY02 FY03 TC														TOTAL							
1,2,3,4 1,2,3,4 1,2,3,4 1,2,3,4 1,2,3,4 1,2,3,4 1,2,3,4 1,2,3,4 1,2,3,4																					
FY96 & PRIOR																					
FY97																					
FY98														1							
FY99																					
FY00														2	2, 3						
FY01														7							
FY02																					
FY03																					
OUTPUT =====>																					
FY96 FY97 FY98 FY99 FY00 FY01 FY02 FY03 TC														TOTAL							
1,2,3,4 1,2,3,4 1,2,3,4 1,2,3,4 1,2,3,4 1,2,3,4 1,2,3,4 1,2,3,4 1,2,3,4																					
FY96 & PRIOR																					
2 1,1,1,2																					
FY97																					
FY98														1							
FY99																					
FY00																					
FY01														2,2,2,1	7						
FY02																					
FY03																					

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CLASSIFICATION: UNCLASSIFIED

EXHIBIT P-3A

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES:

var = various

February 1997

ITEM NO. 158 PAGE 13 CLASSIFICATION: UNCLASSIFIED

Exhibit P-40, Budget Item Justification					Date <div style="text-align: right;">February 1997</div>			
Appropriation (Treasury) Code/CC/BA/BSA/Item Control Number Other Procurement, NAVY/1810/BA-4/BLI#5355					P-1 Line Item Nomenclature Strategic Platform Support Equipment (84U9)			
Program Element for Code B Items:		Other Related Program Elements						
Cost (In Millions)	PY FY 1996	CY FY 1997	BY1 FY 1998	BY2 FY 1999	BY2+1 FY 2000	BY2+2 FY 2001	BY2+3 FY 2002	BY2+4 FY 2003
Procurement Quantity	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Gross Cost	\$0	\$2.1	\$2.3	\$4.1	\$2.3	\$4.6	\$12.5	\$11.9
Total Procurement Cost	\$0	\$2.1	\$2.3	\$4.1	\$2.3	\$4.6	\$12.5	\$11.9
<p>Funding in this P-1 line provides for the procurement of TRIDENT Platform Support Equipment, specifically for ordnance support, ship alterations and test equipment for the TRIDENT Submarine and TRIDENT Refit Facility (TRIREFAC) located at Naval Submarine Bases (Bangor, WA and Kings Bay, GA) and other support facilities. The TRIDENT program has shifted from its modernization phase as defined by QE2 (Sonar/DWS Upgrade Program) to a program designed to maintain TRIDENT's capability to perform its defined mission. This will be accomplished via three programs:</p> <p>1) Sustaining Capability, 2) Obsolete Equipment Replacement (OER) and 3) Common Capability.</p> <p>SUSTAINING CAPABILITY PROGRAM - Funding of technical effort to continue to operationally support current Defensive Weapons Systems (DWS) hardware/software configurations in use on SSBN 726 Class Submarines.</p> <p>OBSOLETE EQUIPMENT REPLACEMENT (OER) - Replacement of existing hardware/software that though functional has become operationally obsolete, is no longer in production or supportable with spare parts, has a high failure rate, or is no longer cost effective to maintain. OER hardware/software changes would be expected to provide a significant cost savings in reduced maintenance costs and would use Commercial-Off-The-Shelf (COTS) Technology where ever possible as long as all technical requirements are met.</p> <p>COMMON CAPABILITY PROGRAM - Funding of technical efforts to support changes onboard TRIDENT or in conjunction with other fleet programs. Goal is to reduce number of hardware/software configuration in use on both SSBN 726 Class Submarines and within the fleet in general.</p> <p>INSTALLATION (ORDNANCE) - Provides funding for ordnance equipment installation (commencing FY98) resulting from OER, Sustaining, or Common Capability Programs.</p>								

Exhibit P-5 Cost Analysis (Page 1) (FOR OSD REVIEW ONLY)						Weapon System		Date: February 1997			
Appropriation (Treasury) Code/CC/BA/BSA/Item Control Number							ID Code	P-1 Line Item Nomenclature (84U9) Strategic Platform Support Equipment Obsolete Equipment Replacement (OER)			
Other Procurement, NAVY/1810/BA-4/BLI#5355							U9221				
WBS COST ELEMENTS Cost (In Millions) (Tailor to System/Item Rqmts)	Quantity	ID Code	PYs Total Cost	PY FY1996 Unit Cost	PY FY1996 Total Cost	CY FY1997 Unit Cost	CY FY1997 Total Cost	BY1 FY1998 Unit Cost	BY1 FY1998 Total Cost	BY2 FY1999 Unit Cost	BY2 FY1999 Total Cost
FY 1996											
NONE	0			0.000	0.000						
FY 1997											
SAWS 6" Countermeasures Devices	1	A				0.548	0.548				
Life Cycle Support Facility Rev. Test	1	A				1.513	1.513				
FY 1998											
MK2 Block 1C on 14 Hulls	2	A						1.156	2.312		
FY 1999											
MK2 Block 1C on 14 Hulls*	4	A								1.023	4.095
Total					.000		2.061		2.312		4.095

(*Average cost for MK2 Block 1C Category would be 1023.75 for 4095K total).

Exhibit P-5a, Procurement History and Planning (Page 1)				Weapon System				DATE: February 1997		
Appropriation (Treasury) Code/CC/BA/BSA/Item Control Number Other Procurement, Navy/1810/BA-4/BLI#5355							P-1 Line Item Nomenclature (84U9) Strategic Platform Support Equipment U9221 Obsolete Equipment Replacement (OER			
WBS COST ELEMENTS (Tailor to System/Item Rqmts)	Qty	Unit Cost	Location of PCO	RFP Issue Date	Contract Method and Type	Contractor and Location	Award Date	Date of First Delivery	Specs Available Now?	Date Revisions Available
Past Year (or last yr of proc)										
FY-1996										
NONE										
FY-1997										
SAWS 6" Countermeasures Devices	1	.548	NAVSEA		PO/FP	TRIDENT Refit Fac./Kings Bay	10/97	2/98	YES	N/A
Life Cycle Support Facility Rev. Test	1	1.513	NAVSEA		PO/FP	NUWC NPT / Newport, RI	10/97	2/98	YES	N/A
FY-1998										
MK2 Block 1C on 14 Hulls	2	1.156	NAVSEA		PO/FP	Raytheon SSD/Newport, RI	12/97	4/98	YES	N/A
FY-1999										
MK2 Block 1C on 14 Hulls *	4	1.023	NAVSEA		PO/FP	Raytheon SSD/Newport, RI	12/98	4/99	NO	N/A

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(*Average cost for MK2 Block 1C Category would be 1023.75 for 4095K total).

Exhibit P-5a, Procurement History and Plannin

Strategic Platform Support Equipment / 84U9MODELS OF SYSTEMS AFFECTED: TRIDENT Defensive Weapons System (CCS MK2 MOD3//DWS MK118 OER Upgrade)TYPE MODIFICATION: Obsolete Equipment Replacement (OER) MODIFICATION TITLE: CCS MK2 MOD3/CCS MK2 Block 1C Upgrade on OHIO Class SubmarineDESCRIPTION/JUSTIFICATION: Replace obsolete equipment and achieve optimum commonality among submarine combat systems

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES: OPEVAL = 7/94

PROJECT UNIT: U9221 Obsolete Equipment Replacement (OER)

FINANCIAL PLAN: (TOA, \$ in Millions)

	Prior Yrs		PY-1 FY1995		PY FY1996		CY FY1997		BY1 FY1998		BY2 FY1999		BY2+1 FY2000		BY2+2 FY2001		BY2+3 FY2002		BY2+4 FY2003		TC To Complete		TOTAL	
	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$
RDT&E										2.56		1.70		1.80									0	6.06
PROC																								
Inst Kit NR																							0	0.00
A Kit																							0	0.00
Comp A																							0	0.00
Comp B																							0	0.00
Comp C																							0	0.00
Eqpt NR																							0	0.00
Eqpt									1	1.06	1	1.09	2	2.18	1	1.16	5	7.64	4	6.64			14	19.77
Eqpt A																							0	0.00
Eqpt B																							0	0.00
ECOs																							0	0.00
Data																							0	0.00
Training Eq									1	1.06	3	3.00			3	2.99	1	1.70	1	1.78			9	10.53
SE																							0	0.00
Other									0.19														0	0.19
Other																							0	0.00
Other																							0	0.00
ICS																							0	0.00
Install Cost																							0	0.00
Total Proc	0	0.00	0	0.00	0	0.00	0	0.00	2	2.31	4	4.09	2	2.18	4	4.15	6	9.34	5	8.42	0	0.00	23	30.49

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Strategic Platform Support Equipment / 84U9MODELS OF SYSTEMS AFFECTED: TRIDENT Defensive Weapons System (CCS MK 2 MOD 3 // DWS MK 118 OER Upgrade)MODIFICATION TITLE: CCS MK 2 MOD 3 / CCS MK 2 Block 1C Upgrade on OHIO Class Submarines INSTALLATION INFORMATION:METHOD OF IMPLEMENTATION: Engineered AvailabilitiesADMINISTRATIVE LEADTIME: 12 MonthsPRODUCTION LEADTIME: 24 MonthsCONTRACT DATES: Prior Year: 06/93

Budget Year 1:

Budget Year 2:

DELIVERY DATE: Prior Year: 06/95

Budget Year 1:

Budget Year 2:

(\$ in Millions)

<u>Cost:</u>	Prior Years		PY-1 FY1995		PY FY1996		CY FY1997		BY1 FY1998		BY2 FY1999		BY2+1 FY2000		BY2+2 FY2001		BY2+3 FY2002		BY2+4 FY2003		TC To Complete		Total	
	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$
See Note #1 Below																							0	0.00
FY 96 & Prior																							0	0.00
FY 97 Equipment																							0	0.00
FY 98 Equipment													2	0.15									2	0.15
FY 99 Equipment															4	0.45							4	0.45
FY 00 Equipment																	2	0.60					2	0.60
FY 01 Equipment																			2	0.25	2	0.30	4	0.55
FY 02 Equipment																			2	0.50	4	1.40	6	1.90
FY 03 Equipment																					5	2.00	5	2.00
To Complete																							0	0.00
Total Installation Cost	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.15	0	0.45	2	0.60	4	0.75	11	3.70	23	5.65

#1, a

#1, b

#1, c

#1, d

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Exhibit P-3a, Individual Modification**Note #1** CCS MK 2 Block 1C installation cost covered under ARCI / CCS MK 2 Block 1C installation during D-5 Conversion Period (SSBNs 730-733).**Note a** Shows installation cost for 1 unit procured in FY98, 1 unit covered by Note #1.**Note b** Shows installation cost for 3 units procured in FY99, 1 unit covered by Note #1.**Note c** Shows installation cost for 3 units procured in FY02, 1 unit covered by Note #1.**Note d** Shows installation cost for 3 units procured in FY03, 2 units covered by Note #1.

Strategic Platform Support Equipment / 84U9**Installation Schedule**

	PY FY1996	CY FY 1997				BY1 FY1998				BY2 FY1999				BY2+1 FY2000				BY2+2 FY2001				BY2+3 etc. FY2002+etc.				TC	Total
		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4		
In																											
FY96 & Pr																											
FY97																											
FY98														0	1	1	0									0	2
FY99																		1	1	1	1					0	4
FY00																						1	0	1	0	0	2
FY01																						1	0	1	0	2	4
FY02																						0	1	0	1	4	6
FY03																										5	5
TC																											
Total In																											23
	PY FY1996	CY FY 1997				BY1 FY1998				BY2 FY1999				BY2+1 FY2000				BY2+2 FY2001				BY2+3 etc. FY2002+etc.				TC	Total
		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4		
Out																											
FY96 & Pr																											
FY97																											
FY98														0	0	1	1									0	2
FY99																		0	1	1	1	1	0	0	0	0	4
FY00																						0	1	0	1	0	2
FY01																						0	1	0	1	2	4
FY02																						0	0	1	0	5	6
FY03																										5	5
TC																											
Total Out																											23

UNCLASSIFIED

BUDGET ITEM JUSTIFICATION SHEET EXHIBIT P-40					DATE: FEBRUARY 1997			
APPROPRIATION/BUDGET ACTIVITY OTHER PROCUREMENT, NAVY/BA-4: ORDNANCE SUPPORT EQUIPMENT					P-1 ITEM NOMENCLATURE/SUBHEAD SSN COMBAT CONTROL SYSTEM/ 84VB/54200			
	FY96	FY97	FY98	FY99	FY00	FY01	FY02	FY03
QUANTITY	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
COST (In Millions)	\$12.5	\$14.4	\$20.5	\$25.6	\$40.1	\$47.9	\$54.5	\$61.0
<p><u>FCS MK 117/CCS MK 1 IMPROVEMENTS (VB011)</u> Engineering Changes/Auxiliary Equipment (VB011) - Provides for the procurement of Engineering Changes (EC) and Ordnance Alterations (ORDALT) to correct fleet reported problems; Reliability, Maintainability, and Availability (RM&A) deficiencies, and Safety issues associated with in-service SSN/SSBN Combat Control System components and Fire Control System components and interface Equipments, interfacing systems and peripheral or special equipment. Examples include: corrections to Weapons Control Console power supplies; keyboard printer replacements; Vertical Launch System suite improvements to satisfy Environmental Stress Screening (ESS) deficiencies; and correction of RM&A deficiencies of the Mk 92 Attack Control Console.</p> <p><u>CCS OBSOLETE EQUIPMENT REPLACEMENT (OER) PROGRAM (VB034)</u> The SSN Combat System OER Program (VB034) - Mandated by OPNAV to achieve maximum commonality onboard SSN 688 Class, SSN 751 Flight and SSBN 726 Class submarines. The CCS OER program is commonly referred to as the Combat Control System (CCS) Mk 2 Program D0.</p> <p>In FY 97 and beyond the OER program will consist of CCS Mk2 Block 1C upgrade kits which will maximize the use of commercial electronics and NDI standard products, reducing procurement and life cycle costs while providing an open architecture for future growth. Combat control display processors will be replaced with Navy standard commercial technology. TAC-X computers will be procured and integrated with the Combat Control System via fiber optic local area network; commercial electronics will also be procured and packaged to replace the Data Transfer System (DTS), AN/UGC-136 keyboard printer and the Tactical Weapons Simulator (TWS).</p> <p>Additionally, the OER program will procure (20) Tomahawk Land Attack Missile - Nuclear (TLAM-N) Portable Launching Systems (PLSs) and develop and produce the necessary Engineering Change Instructions (ECIs) and Ship Alteration (SHIPALT) kits for PLS compatible SSN 688 and SSN 688I hulls. The TLAM-N PLS is a portable on-demand system that will provide SSN 688/688I and NSSN Class submarines the capability of supporting TLAM-N regeneration and launch with minimum impact to the submarine and crew.</p>								

DD FORM 2454, JUN 86	<table border="1" style="margin: auto;"> <tr> <th colspan="2">P-1 SHOPPING LIST</th> </tr> <tr> <td style="text-align: center;">ITEM NO.</td> <td style="text-align: center;">PAGE NO.</td> </tr> <tr> <td style="text-align: center;">161</td> <td style="text-align: center;">1</td> </tr> </table>	P-1 SHOPPING LIST		ITEM NO.	PAGE NO.	161	1	CLASSIFICATION: EXHIBIT P-40
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BUDGET ITEM JUSTIFICATION SHEET EXHIBIT P-40					DATE: FEBRUARY 1997			
APPROPRIATION/BUDGET ACTIVITY OTHER PROCUREMENT, NAVY/BA-4: ORDNANCE SUPPORT EQUIPMENT					P-1 ITEM NOMENCLATURE/SUBHEAD SSN COMBAT CONTROL SYSTEM/ 84VB/54200			
	FY96	FY97	FY98	FY99	FY00	FY01	FY02	FY03
QUANTITY	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
COST (In Millions)	\$12.5	\$14.4	\$20.5	\$25.6	\$40.1	\$47.9	\$54.5	\$61.0
<u>PRODUCTION SUPPORT (VB033)</u> This account (VB033) procures technical data, maintenance data, mock-ups, demonstrations and testing products directly for the SSN Combat System Obsolete Equipment Replacement (OER) program. Also procured are services required to support production engineering, quality assurance, product improvement and acceptance testing for production line items. Technical on-site support at shipyards and depots for hardware related problems is also included.								
<u>LOGISTIC SUPPORT REQUIREMENTS (VB900)</u> This account (VB900) procures engineering and technical support at the organic depot (NUWC Division, Keyport) for equipment maintenance and overhauls. Also procured are engineering services which perform essential documentation updates related to major hardware revisions. VB900 also procures laboratory hardware requirements including Generalized Simulation/Stimulation (GSS) hardware and auxiliary testing and operating equipment.								
<u>INITIAL TRAINING (VB995)</u> This account funds the initial factory training including both training deliverables and instructional services to familiarize the initial cadre of instructional personnel with an end item. Also included is the cost of preparation of training packages through the Ready-for-Training (RFT) date.								
<u>CONSULTING SERVICES (VB983)</u> This account provides assistance for asset management, cost analyses, ORDALT planning, preparation of contract specifications, monitoring of contract deliverables, prime contractor cost, schedule and performance monitoring, ILS planning and GFI coordination.								
<u>EQUIPMENT INSTALLATION (VB5NS)</u> Funds are administered by SEA 914 for the installation of Combat Control System equipments included in the Fleet Modernization Program. The budget reflects the transfer of design services into the appropriate equipment P-1 line item in accordance with full funding policy FY 98 and out.								
<u>OTHER INFORMATION</u> Developmental efforts are funded by Program Element 64562N within the SSN Combat Control System Improvement Program S0236. CCS Mk 2 is a functionally equivalent software program (Program D0) that rehosed and repackaged the CCS Mk1 program into a program capable of cost effective updating and software maintenance for SSN 688 and TRIDENT CLASS submarines. CNO direction to install a functionally equivalent Combat System was given per CNO letter 5000 Ser 02/7U384408 dtd 09 July 1987. On 28 May 1996, the CCS MK2 Block 1C program received Milestone II approval and is initiating development effort with Raytheon Electronic Systems. The total procurement objective for the SSN COMBAT CONTROL SYSTEM budget is to outfit 45 SSN submarines, 2 Maintenance Trainers, and 4 Team Trainers with CCS Mk2 Block 1C.								

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BUDGET ITEM JUSTIFICATION SHEET EXHIBIT P-40									DATE: FEBRUARY 1997		
APPROPRIATION/BUDGET ACTIVITY OTHER PROCUREMENT, NAVY/BA-4: ORDNANCE SUPPORT EQUIPMENT									P-1 ITEM NOMENCLATURE/SUBHEAD SSN COMBAT CONTROL SYSTEM/ 84VB/54200		
In Fiscal Year FY 1995 and prior, 14 CCS MK2 systems have been procured for SSN 688 Class submarines.											
	<u>Prior Years</u>	<u>FY 1996</u>	<u>FY 1997</u>	<u>FY 1998</u>	<u>FY 1999</u>	<u>FY 2000</u>	<u>FY 2001</u>	<u>FY 2002</u>	<u>FY 2003</u>	<u>To Complete</u>	<u>Total Program</u>
CCS MK2 BLOCK 1C	0 / \$0	0 / \$0	2 / \$2.7	7 / \$10.4	6 / \$12.8	9 / \$20.8	9 / \$22.5	9 / \$23.5	9 / \$23.7	0 / \$0	51 / \$116.4
TLAM-N PLS	0 / \$0	0 / \$0	0 / \$0	0 / \$0	3 / \$2.0	10 / \$6.8	7 / \$4.8	0 / \$0	0 / \$0	0 / \$0	20 / \$13.6

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WEAPON SYSTEM COST ANALYSIS EXHIBIT P-5										DATE: FEBRUARY 1997	
APPROPRIATION/BUDGET ACTIVITY						P-1 ITEM NOMENCLATURE/SUBHEAD					
OTHER PROCUREMENT, NAVY/BA-4: ORDNANCE SUPPORT EQUIPMENT						SSN COMBAT CONTROL SYSTEM 84VB/54200					
COST CODE	ELEMENT OF COST	IDENT CODE	TOTAL COST IN THOUSANDS OF DOLLARS								
			FY96		FY97		FY98		FY99		
			QTY	TOTAL COST	QTY	TOTAL COST	QTY	TOTAL COST	QTY	TOTAL COST	
VB011	<u>FCS MK117/CCS MK 1 IMPROVEMENTS</u> ECP/AUXILIARY EQUIPMENT	A		\$1,424 1,424		\$1,648 1,648		\$1,095 1,095		\$703 703	
VB034	<u>CCS OER PROGRAM MODS</u> CCS MK2 BLOCK 1C UPGRADE KITS TLAM-N PORTABLE LAUNCHING SYSTEMS (PLS)	B			2	2,717 2,717	7	10,396 10,396	6 3	14,779 12,797 1,982	
VB033	PRODUCTION SUPPORT			1,603		1,643		1,527		1,573	
VB900	CONSULTING SERVICES			926		1,088		1,340		1,380	
VB983	LOGISTICS SUPPORT			6,986		4,810		3,939		4,318	
VB995	INITIAL TRAINING			1,457		1,409		114		290	
	MATERIAL TOTAL			\$12,396		\$13,315		\$18,411		\$23,043	
VB5NS	EQUIPMENT INSTALLATION (FMP)			138		1,040		2,100		2,216	
VBDSA	INSTALLATION DESIGN SERVICES (FMP)									\$386	
	GRAND TOTAL			\$12,534		\$14,355		\$20,511		\$25,645	

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BUDGET PROCUREMENT HISTORY AND PLANNING EXHIBIT P-5A									DATE: FEBRUARY 1997		
APPROPRIATION/BUDGET ACTIVITY OTHER PROCUREMENT, NAVY/BA-4: ORDNANCE SUPPORT EQUIPMENT						P-1 ITEM NOMENCLATURE/SUBHEAD SSN COMBAT CONTROL SYSTEM 84VB/54200					
COST CODE	LINE ITEM/ FISCAL YEAR	CONTRACTOR AND LOCATION	CONTRACT METHOD & TYPE	CONTRACTED BY	AWARD DATE	DATE OF FIRST DELIVERY	QUANTITY	UNIT COST	SPECS AVAILABLE NOW	SPEC REV REQ'D	IF YES WHEN AVAILABLE
VB034	CCS MK2 OER										
	BLOCK 1C UPGRADES (FY97)	RAYTHEON ELECTRONIC SYSTEMS Portsmouth, RI	SS/FP	NAVSEA	03/97	03/99	2	\$1,358.5	YES	NO	
	BLOCK 1C UPGRADES (FY98)	RAYTHEON ELECTRONIC SYSTEMS Portsmouth, RI	SS/FP	NAVSEA	03/98	11/99	7	\$1,485.1	YES	NO	
	BLOCK 1C UPGRADES (FY99)	RAYTHEON ELECTRONIC SYSTEMS Portsmouth, RI	SS/FP	NAVSEA	03/99	11/00	6	\$2,132.8	YES	NO	
	TLAM-N PLS (FY 99)	UNKNOWN	C/FP	NAVSEA	03/99	03/01	3	\$660.6	YES	NO	
REMARKS:											
D. A CCS MK2 Block 1C upgrade will maximize use of commercial electronics and NDI standard products. TAC-X computers will be procured and integrated with the Combat Control System via fiber optic local area network and commercial electronics will be procured and packaged to replace the Data Transfer System (DTS), AN/UGC-136 keyboard printer and the Tactical Weapons Simulator (TWS).											

CLASSIFICATION: UNCLASSIFIED																	DATE:		FEBRUARY 1997												
P3A																															
SSN COMBAT CONTROL SYSTEM /84VB																															
MODIFICATION TITLE:		SSN COMBAT CONTROL SYSTEM (84VB)/54200																													
MODELS OF SYSTEM AFFECTED:		CCS MK2 D0																													
DESCRIPTION/JUSTIFICATION:		This program replaces obsolete equipment and will achieve optimum commonality among submarine combat systems while maximizing the use of commercial electronics and NDI products.																													
DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES:		TECHEVAL 1/95; OPEVAL 3/95; MILESTONE III 05/96																													
		FY96															TO COMP		TO COMP		TOTAL		TOTAL								
		QTY	& PRIOR	QTY	FY97	QTY	FY98	QTY	FY99	QTY	FY00	QTY	FY01	QTY	FY02	QTY	FY03	QTY	COST	QTY	COST										
FINANCIAL PLAN (IN MILLIONS)																															
RDT&E																					0		0.000								
PROCUREMENT		21	92.500	0	0.000	0	0.000	0	0.000	0	0.000	0	0.000	0	0.000	0	0.000	0	0.000	21	92.500										
QUANTITY		14	68.100																	14		68.100									
INSTALLATION KITS																					0		0.000								
INSTALLATION KITS NONRECURRING																					0		0.000								
EQUIPMENT																					0		0.000								
EQUIPMENT NONRECURRING																					0		0.000								
ENGINEERING CHANGE ORDERS																					0		0.000								
DATA																					0		0.000								
TRAINING EQUIPMENT		7	24.400																	7		24.400									
SUPPORT EQUIPMENT																					0		0.000								
OTHER																					0		0.000								
INTERIM CONTRACTOR SUPPORT																					0		0.000								
INSTALLATION OF HARDWARE																															
FY96 EQUIPMENT AND PRIOR		7	17.138													1		NOTE		3		NOTE		3		NOTE		14		17.138	
FY97 EQUIPMENT																					0		0.000								
FY98 EQUIPMENT																					0		0.000								
FY99 EQUIPMENT																					0		0.000								
FY00 EQUIPMENT																					0		0.000								
FY01 EQUIPMENT																					0		0.000								
FY02 EQUIPMENT																					0		0.000								
TO COMPLETE																					0		0.000								
ORDALTS																					0		0.000								
TOTAL INSTALLATION COST		7	17.138	0	0.000	0	0.000	1	0.000	3	0.000	3	0.000	0	0.000	0	0.000	0	0.000	14	17.138										
TOTAL PROCUREMENT COST					92.500	0.000			0.000			0.000			0.000			0.000			92.500										
TOTAL COST					109.638	0.000			0.000			0.000			0.000			0.000			109.638										
METHOD OF IMPLEMENTATION:		Shipyard/AIT				ADMINISTRATIVE LEADTIME:				12 MONTHS				PRODUCTION LEADTIME:				36 MONTHS													
CONTRACT DATE:		PRIOR YEAR:				CURRENT YEAR:				N/A				BUDGET YEAR 1:				N/A				BUDGET YEAR 2:				N/A					
PRODUCTION DELIVER DATE:		PRIOR YEAR:				CURRENT YEAR:				N/A				BUDGET YEAR 1:				N/A				BUDGET YEAR 2:				N/A					
INSTALLATION SCHEDULE:																															
INPUT =====>		FY96/Prior		FY97		FY98		FY99		FY00		FY01		FY02		FY03		TC													
		1,2,3,4		1,2,3,4		1,2,3,4		1,2,3,4		1,2,3,4		1,2,3,4		1,2,3,4		1,2,3,4		1,2,3,4		TOTAL											
FY96 & PRIOR		0,0,0,7		0,0,0,0		0,0,0,0		0,1,0,0		0,1,2,0		2,1,0,0		0,0,0,0		0,0,0,0		0,0,0,0		14											
FY97																															
FY98																															
FY99																															
FY00																															
FY01																															
FY02																															
OUTPUT =====>		FY96/Prior		FY97		FY98		FY99		FY00		FY01		FY02		FY03		TC													
		1,2,3,4		1,2,3,4		1,2,3,4		1,2,3,4		1,2,3,4		1,2,3,4		1,2,3,4		1,2,3,4		1,2,3,4		TOTAL											
FY96 & PRIOR		0,0,0,7		0,0,0,0		0,0,0,0		0,0,1,0		0,1,2,0		2,1,0,0		0,0,0,0		0,0,0,0		0,0,0,0		14											
FY97																															
FY98																															
FY99																															
FY00																															
FY01																															
FY02																															

This exhibit shows SSN installations only. No trainer installations are shown.
NOTE: 7 CCS MK2 DO ship sets procured to date will be installed in FY99 and beyond with CCS MK 2 Block 1C upgrades. Installation costs are shown on P-3A for CCS MK 2 Block 1C.

P-1 SHOPPING LIST	
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[illegible]

P-1 SHOPPING LIST	
ITEM NO.	PAGE NO.
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EXHIBIT P-3A

33A	INDIVIDUAL MODIFICATION																DATE:		FEBRUARY 1997		
SSN COMBAT CONTROL SYSTEM /84VB		SSN COMBAT CONTROL SYSTEM (84VB)/54200																			
MODIFICATION TITLE:		Upgrade AN/BSY-1 to CCS MK2 D0 Block 1C																			
MODELS OF SYSTEM AFFECTED:		This program replaces obsolete equipment and will achieve optimum commonality among submarine combat systems while maximizing the use of commercial electronics and NDI products.																			
DESCRIPTION/JUSTIFICATION:		MILESTONE II 05/96; TECHEVAL 12/98; OPEVAL 10/99; MILESTONE III 05/00																			
DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES:																					
																		TO	TO		
																		COMP	COMP	TOTAL	TOTAL
																		QTY	COST	QTY	COST
FINANCIAL PLAN (IN MILLIONS)																					
RDT&E																					
PROCUREMENT		0	0.000	1	1.623	2	4.576	5	11.652	5	11.889	6	14.592	4	9.818	0	0.000	0	0.000	23	54.150
QUANTITY				1	1.623	2	4.576	5	11.652	4	9.515	6	14.592	4	9.818					22	51.776
INSTALLATION KITS																				0	0.000
INSTALLATION KITS NONRECURRING																				0	0.000
EQUIPMENT																				0	0.000
EQUIPMENT NONRECURRING																				0	0.000
ENGINEERING CHANGE ORDERS																				0	0.000
DATA																				0	0.000
TRAINING EQUIPMENT										1	2.374									1	2.374
SUPPORT EQUIPMENT																				0	0.000
OTHER																				0	0.000
INTERIM CONTRACTOR SUPPORT																				0	0.000
INSTALLATION OF HARDWARE																					
FY96 EQUIPMENT AND PRIOR																				0	0.000
FY97 EQUIPMENT								1 *	0.830											1	0.830
FY98 EQUIPMENT										2 *	1.702									2	1.702
FY99 EQUIPMENT												5*	4.305							5	4.305
FY00 EQUIPMENT														4	3.516					4	3.516
FY01 EQUIPMENT																6	5.464			6	5.464
FY02 EQUIPMENT																		4	3.719	4	3.719
TO COMPLETE																				0	0.000
ORDALTS																				0	0.000
TOTAL INSTALLATION COST		0	0.000	0	0.000	0	0.000	1	0.830	2	1.702	5	4.305	4	3.516	6	5.464	4	3.719	22	19.536
TOTAL PROCUREMENT COST			0.000		1.623		4.576		11.652		11.889		14.592		9.818		0.000		0.000		54.150
TOTAL COST			0.000		1.623		4.576		12.482		13.591		18.897		13.334		5.464		3.719		73.686
METHOD OF IMPLEMENTATION: OPERATIONAL ALTERNATION/TIG		ADMINISTRATIVE LEADTIME:				12 MONTHS				PRODUCTION LEADTIME:				24 MONTHS							
CONTRACT DATE:		PRIOR YEAR:		CURRENT YEAR:		3/97		BUDGET YEAR 1:		3/98		BUDGET YEAR 2:		3/99							
PRODUCTION DELIVER DATE:		PRIOR YEAR:		CURRENT YEAR:		3/99		BUDGET YEAR 1:		11/99		BUDGET YEAR 2:		11/00							
INSTALLATION SCHEDULE:																					
INPUT =====>		FY96/Prior		FY97		FY98		FY99		FY00		FY01		FY02		FY03		TC			
		1,2,3,4		1,2,3,4		1,2,3,4		1,2,3,4		1,2,3,4		1,2,3,4		1,2,3,4		1,2,3,4				TOTAL	
FY96 & PRIOR																					
FY97		</																			

* FY's 99(1), 00(3) & FY01(3) reflect the installation of CCS Mk2 D0 units procured and upgraded to CCS Mk2 D0 Blk 1C. Installation costs for those units are reflected in their respective years on this page.

P-1 SHOPPING LIST	
ITEM NO.	PAGE NO.
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EXHIBIT P-3A

33A	INDIVIDUAL MODIFICATION																DATE:		FEBRUARY 1997						
SSN COMBAT CONTROL SYSTEM /84VB		SSN COMBAT CONTROL SYSTEM (84VB)/54200																							
MODIFICATION TITLE:		SSN COMBAT CONTROL SYSTEM (84VB)/54200																							
MODELS OF SYSTEM AFFECTED:		Upgrade CCS MK1 to CCS MK2 D0 Block 1C																							
DESCRIPTION/JUSTIFICATION:		This program replaces obsolete equipment and will achieve optimum commonality among submarine combat systems while maximizing the use of commercial electronics and NDI products.																							
DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES:		MILESTONE II 05/96; TECHEVAL 12/98; OPEVAL 10/99; MILESTONE III 05/00																TO COMP		TO COMP		TOTAL		TOTAL	
		FY96		FY97		FY98		FY99		FY00		FY01		FY02		FY03									
FINANCIAL PLAN (IN MILLIONS)		QTY	& PRIOR	QTY	FY97	QTY	FY98	QTY	FY99	QTY	FY00	QTY	FY01	QTY	FY02	QTY	FY03	QTY	COMP	COMP	TOTAL	TOTAL			
RDT&E																				0	0.000				
PROCUREMENT		0	0.000	0	0.000	0	0.000	0	0.000	3	7.762	3	7.906	4	12.455	9	23.664	0	0.000	19	51.787				
QUANTITY				0	0.000	0	0.000	0	0.000	3	7.762	3	7.906	4	12.455	7	21.664			17	49.787				
INSTALLATION KITS																				0	0.000				
INSTALLATION KITS NONRECURRING																				0	0.000				
EQUIPMENT																				0	0.000				
EQUIPMENT NONRECURRING																				0	0.000				
ENGINEERING CHANGE ORDERS																				0	0.000				
DATA																				0	0.000				
TRAINING EQUIPMENT																2	2.000			2	2.000				
SUPPORT EQUIPMENT																				0	0.000				
OTHER																				0	0.000				
INTERIM CONTRACTOR SUPPORT																				0	0.000				
INSTALLATION OF HARDWARE																									
FY96 EQUIPMENT AND PRIOR																				0	0.000				
FY97 EQUIPMENT																				0	0.000				
FY98 EQUIPMENT																				0	0.000				
FY99 EQUIPMENT																				0	0.000				
FY00 EQUIPMENT														3	10.525					3	10.525				
FY01 EQUIPMENT																3	10.747			3	10.747				
FY02 EQUIPMENT																		4	14.828	4	14.828				
FY03 EQUIPMENT																		7	26.495	7	26.495				
TO COMPLETE																				0	0.000				
ORDALTS																				0	0.000				
TOTAL INSTALLATION COST		0	0.000	0	0.000	0	0.000	0	0.000	0	0.000	0	0.000	3	10.525	3	10.747	11	41.323	17	62.595				
TOTAL PROCUREMENT COST			0.000		0.000		0.000		0.000		7.762		7.906		12.455		23.664		0.000		51.787				
TOTAL COST			0.000		0.000		0.000		0.000		7.762		7.906		22.980		34.411		41.323		114.382				
METHOD OF IMPLEMENTATION: OPERATIONAL ALTERNATION/TIG		ADMINISTRATIVE LEADTIME:				12 MONTHS				PRODUCTION LEADTIME:				24 MONTHS											
CONTRACT DATE:		PRIOR YEAR:		CURRENT YEAR:		3/97		BUDGET YEAR 1:		3/98		BUDGET YEAR 2:		3/99											
PRODUCTION DELIVER DATE:		PRIOR YEAR:		CURRENT YEAR:		3/99		BUDGET YEAR 1:		11/99		BUDGET YEAR 2:		11/00											
INSTALLATION SCHEDULE:																									
INPUT =====																									

P-1 SHOPPING LIST	
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EXHIBIT P-3A

DATE: FEBRUARY 1996

TO	TO	
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QTY	& PRIOR	QTY	FY97	QTY	FY98	QTY	FY99	QTY	FY00	QTY	FY01	QTY	FY02	QTY	FY03	QTY	COST	QTY	COST
-----	---------	-----	------	-----	------	-----	------	-----	------	-----	------	-----	------	-----	------	-----	------	-----	------

PRODUCTION LEADTIME: 24 MONTHS

FY96/Prior	FY97	FY98	FY99	FY00	FY01	FY02	FY03	TC
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EXHIBIT P-3A

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BUDGET ITEM JUSTIFICATION SHEET EXHIBIT P-40					DATE: FEBRUARY 1997			
APPROPRIATION/BUDGET ACTIVITY OTHER PROCUREMENT, NAVY/BA-4: ORDNANCE SUPPORT EQUIPMENT					P-1 ITEM NOMENCLATURE/SUBHEAD SUBMARINE ASW SUPPORT EQUIPMENT/ 54310/846A			
	FY96	FY97	FY98	FY99	FY00	FY01	FY02	FY03
QUANTITY	N/A	N/A	N/A	N/A	N/A	N/A		N/A
COST (In Millions)	\$6.3	\$9.8	\$3.4	\$3.8	\$3.7	\$4.0	\$9.1	\$5.2
<p>This line item procures modifications and improvements to Attack and Ballistic Missile Submarine fire control equipment, interface systems, torpedo tube system components and torpedo tube test equipment. These requirements arise as a result of the introduction of new or modified weapons and sensors and their subsequent evaluation test and operational use. Also procured are reliability, maintainability, functional and safety modifications and tactical improvements resulting from operational use experience.</p> <p>This line funds modifications and improvements in the following categories:</p> <p>6A001 - The Sub FCS ORDALTs category provides design modifications to in-service SSBNs and to provide reliability and maintainability improvements to Fire Control Interface Equipments, interfacing systems, and to peripheral or special equipment, including Bearing and Range Indicators MK 116, Plotters MK 19, and Target Bearing Transmitters MK 17, of MK 117 FCS/CCS MK 1 and BSY-1 FCS installed in SSNs and SSBNs.</p> <p>6A002 - The Submarine Torpedo Tube Support category funds in-service support and alteration procurements for all submarine torpedo tubes ejection pumps, handling systems, and countermeasure launchers. Recurring efforts are CASREP support to fleet units, emergency ORDALTS, Bore Gage/Test Equipment Procurement, Engineering Change Proposal support and prototype ORDALTS. ORDALTS kits are procured to correct significant deficiencies in equipment affecting personnel safety, ship safety and system performance.</p> <p>6A830 - This is production engineering services in support of design modifications to in-service SSBNs and in relation to reliability of improvement to Fire Control Interface Equipments and interfacing systems.</p> <p>6A5IN - Installing agents will be various Naval Shipyards. All installations will be on SSN 688 Class Submarines.</p> <p>The total objective for TEP Quieting ORDALTs is 37 units, total cost of \$38.0 million. Seventeen units were procured with FY96 and prior funds, and four units with FY97 funds, and two units procured in Budget year, remaining 14 units to be procured in subsequent years.</p>								

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WEAPON SYSTEM COST ANALYSIS EXHIBIT P-5									DATE: FEB 1997	
APPROPRIATION/BUDGET ACTIVITY OTHER PROCUREMENT, NAVY/BA-4: ORDNANCE SUPPORT EQUIPMENT						P-1 ITEM NOMENCLATURE/SUBHEAD SUBMARINE ASW SUPPORT EQUIPMENT 54310/846A				
COST CODE	ELEMENT OF COST	IDENT CODE	TOTAL COST IN THOUSANDS OF DOLLARS							
				FY96	FY97		FY98		FY99	
			QTY	TOTAL COST	QTY	TOTAL COST	QTY	TOTAL COST	QTY	TOTAL COST
6A001	SUBMARINE (N-87) SUB F/C ORDALTS SSN & SSBN ORDALTS			\$1,100 1,100		\$1,191 1,191		\$0 0		\$0 0
6A002	SUB TORPEDO TUBE SUPPORT O/A PROTOTYPE/ECP MATERIAL 2J COG MATERIAL			2,913 292 227		6,085 411 435		1,996 270 219		2,259 247 317
	TEST EQUIPMENT BORE GAGE TEST FACILITY EQUIPMENT MISC. TEST EQUIPMENT			240 291 318		321 461 453		177 267 273		261 323 311
	TEP ORDALTS/TRIDS O/A 16264 TEP QUIET 1 TPES FIRING VALVE SSN 688 MINE CAPABILITY FIRE CONTROL PANEL (PORTABLE)		4	1,545	4 8 8	1,605 803 1,596	2	790	2	800
6A830	PRODUCTION ENGINEERING			116		135		0		0
6A5IN	INSTALLATION OF EQUIPMENT (FMP)			2,176		2,385		1,446		1,549
	GRAND TOTAL			\$6,305		\$9,796		\$3,442		\$3,808

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CLASSIFICATION:

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P3A																	INDIVIDUAL MODIFICATION				1-Feb-97			
SUBMARINE ASW SUPPORT EQUIPMENT/846A																								
MODIFICATION TITLE: SUB TORPEDO TUBE ORDALT 16264																								
MODELS OF SYSTEM AFFECTED:																	SUBMARINE ASW SUPPORT EQUIPMENT							
DESCRIPTION/JUSTIFICATION:																								
DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES:																								
																	TO	TO						
																	COMP	COMP	TOTAL	TOTAL				
																	QTY	COST	QTY	COST				
FINANCIAL PLAN (IN MILLIONS)																								
RD&E																								
PROCUREMENT																								
QUANTITY (FY96 quantity includes 1 trainer)																								
INSTALLATION KITS																								
INSTALLATION KITS NONRECURRING																								
EQUIPMENT																								
EQUIPMENT NONRECURRING																								
ENGINEERING CHANGE ORDERS																								
DATA																								
TRAINING EQUIPMENT																								
SUPPORT EQUIPMENT																								
OTHER																								
INTERIM CONTRACTOR SUPPORT																								
INSTALLATION OF HARDWARE																								
FY96 EQUIPMENT AND PRIOR																								
FY97 EQUIPMENT																								
FY98 EQUIPMENT																								
FY99 EQUIPMENT																								
FY00 EQUIPMENT																								
FY01 EQUIPMENT																								
FY02 EQUIPMENT																								
FY03 EQUIPMENT																								
TO COMPLETE																								
*Trainer has no install costs																								
TOTAL INSTALLATION COST																								
TOTAL PROCUREMENT COST																								
TOTAL COST																								
METHOD OF IMPLEMENTATION:																								
CONTRACT DATE:																								
PRODUCTION DELIVER DATE:																								
INSTALLATION SCHEDULE:																								
INPUT =====>																								
FY96 & PRIOR																								
FY97																								
FY98																								
FY99																								
FY00																								
FY01																								
FY02																								
FY03																								
TO COMPLETE																								
OUTPUT =====>																								
FY96 & PRIOR																								
FY97																								
FY98																								
FY99																								
FY00																								
FY01																								
FY02																								
FY03																								
TO COMPLETE																								

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EXHIBIT P-3A

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CLASSIFICATION

BUDGET ITEM JUSTIFICATION SHEET P-40					DATE: February 1997			
APPROPRIATION/BUDGET ACTIVITY OTHER PROCUREMENT, NAVY BA-4 ORDNANCE SUPPORT EQUIPMENT					P-1 ITEM NOMENCLATURE SURFACE ASW SUPPORT EQUIPMENT, (544900) 846B			
	1996	1997	1998	1999	2000	2001	2002	2003
QUANTITY								
COST (In Millions)	\$6.9	\$7.1	\$5.9	\$6.1	\$4.6	\$4.7	\$4.4	\$4.5
<p>This line item provides funding to procure Reliability, Maintainability and Availability (RM&A) and Safety modifications through the Ordnance Alteration (ORDALT) process to in-service ASW Fire Control, Surface Vessel Torpedo Tubes and related support and test equipment. These requirements arise as a result of evaluation, testing and Fleet use of existing, new or modified ASW weapons and/or related systems and subsystems. Included in this line item are all related procurements for training and simulation equipment required for the life cycle support efforts of this equipment. ORDALT quantities are highly variable. This budget reflects the transfer of design services into the appropriate equipment P-1 line item in accordance with full funding policies in FY98 and out.</p> <p>Cost Code 6B001 provides funding for Ordnance Alteration (ORDALT) kits for the ASW Underwater Fire Control System (UFCS) MK 116 Mods 2 and 4 and the Control Panel MK 309 Mods 0 and 2. UFCS MK 116 Surface Switchboard MK 34 is also included. Funding for FY 96 - FY 97 includes modifications for DDG 993 Class 2B program and CG 52 to 55 4A programs in support of the UFCS MK 116 Mods 2 and 4. The following RM&A and safety ORDALTs are required because of equipment age and include ORDALTs 30370, 16468, 16405, 30394, 16306, 16307, 16308, 16311, 16591, 30394, 30447. Other ORDALTs will be required and are highly variable contingent on shipboard configurations. All installations are completed via AIT and are variable contingent on pier side availabilities. All shipboard installations are completed via AIT and are contingent on pier side availabilities. Outyear ORDALT procurements are variable, based on shipboard configurations.</p> <p>(1) Installing Agent: All ORDALTs are installed via AIT. (2) Installations will be accomplished over the remaining fiscal years, during TYCOM scheduled pier side availabilities. (3) End items are variable, dependent on shipboard configuration and equipment affected. Shoresites include: NSWC Dahlgren, NUWC Keyport and Fleet ASW School.</p>								

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BUDGET ITEM JUSTIFICATION SHEET P-40		DATE: February 1997
APPROPRIATION/BUDGET ACTIVITY	P-1 ITEM NOMENCLATURE	
OTHER PROCUREMENT, NAVY BA-4 ORDNANCE SUPPORT EQUIPMENT	SURFACE ASW SUPPORT EQUIPMENT, (544900) 846B	
<p>Cost Code 6B002 provides Weapon Control Support Equipment for the Underwater Fire Control System MK 116 shore site laboratory at NSWC, Dahlgren and the Control Panel MK 309 shore site laboratory at NUWC, Keyport. Procurements will ensure laboratories are at Fleet baseline configurations.</p> <p>Cost Code 6B004 provides funding for Surface Vessel Torpedo Tubes (SVTT) MK 32 and ancillary equipment. ORDALT procurements include: SVTT: 15713, 16412, 16375, 16460, 16493, 16564, 16594; Torpedo Loading Tray: 15714, 16413; Air Charging Panel (TBD); Interface Junction Box (TBD); and Torpedo Test Shape (TTS) TBD. ORDALT procurements are highly variable, dependant on shipboard configurations and equipment age. Installations are highly variable, via AIT, based on pier side availabilities and ship homeports.</p> <p>(1) Installation agent: All ORDALTs are installed via AIT.</p> <p>(2) Installations will be accomplished over the remaining fiscal years, during TYCOM scheduled pier side availabilities.</p> <p>(3) End items are variable, dependant on shipboard configuration and equipment affected.</p> <p>Shoresites include NUWC, Newport; NSWC, Louisville; and Fleet/Service School Commands.</p> <p>Cost Code 6B005 provides Shipboard Training equipment not otherwise procured as part of an ASW system. Procurements include various quantities of training support equipment, along with various interfacing equipments to the UFCS MK 116 computer operating system. Funding efforts include follow on procurements for shipboard training efforts, such as the T5/T6 requirement onboard CG 52-55 and CBT fabrication for shipboard use.</p> <p>(1) Installing Agent: SHIPALT 305K(DDG 993 CI) - AIT; SHIPALT 471K (CG 52-CG 55) - Shipyards</p> <p>(2) When Installation is to be made: SHIPALT 305K - 3rd and 4th QTR FY 95 (complete); SHIPALT 471K FY 97 (3), FY 98 (1)</p> <p>(3) List of end items or facilities: SHIPALT 305K - DDG 993, 994, 995, 996; SHIPALT 471K CG 52, 53, 54, 55</p> <p>Shoresites: NSWC Dahlgren (QTY 2), Fleet ASW School (QTY 1).</p> <p>Cost Code 6B007 provides funds for equipment that requires modification as a result of Torpedo MK 46 SLEP/MK 50 Fleet introduction. Procurements include changes to the Torpedo Presetter Test Set MK 432 Mod 4, for MK 46/MK 50 identification changes. Outyear procurements will be a result of digital Torpedo MK 50 changes that require ASW Fire Control or SVTT modifications.</p>		

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BUDGET ITEM JUSTIFICATION SHEET P-40		DATE: February 1997
APPROPRIATION/BUDGET ACTIVITY OTHER PROCUREMENT, NAVY BA-4 ORDNANCE SUPPORT EQUIPMENT	P-1 ITEM NOMENCLATURE SURFACE ASW SUPPORT EQUIPMENT, (544900) 846B	
<p>Cost Code 6B011 is used to procure Surface Vessel Torpedo Tubes (SVTT) shore site laboratory equipment for Launcher System Facilities (LSF). LSF's are used to simulate shipboard conditions for the over the side torpedo launchers in the trouble shooting of Fleet reported problems, as well as for the development of the required ORDALTs.</p> <p>Cost Code 6B830 provides the necessary engineering support funds to cover the associated ILS elements, ECP reviews and engineering audits for ASW Fire Control and SVTT ORDALT production.</p> <p>Cost Code 6B860 provides in-house Navy acceptance test and evaluation funding required for the safety and quality assurance testing of all ASW Fire Control and SVTT ORDALTs.</p> <p>Cost Code 6B900 provides the necessary funding for NAVSEA Headquarters (HQ) consulting services required to ensure all production efforts use NDI and COTS in conjunction with operation and safety requirements to include all ORDALT production, test and installation scheduling.</p> <p>Cost Code 6B5IN funding is for the installation of all equipment (ORDALTs and SHIPALTs) under the Fleet Modernization Program (FMP). ORDALT AIT pierside installations are variable and contingent on fleet scheduling.</p>		

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WEAPON SYSTEM COST ANALYSIS EXHIBT (P5)								DATE: February 1997		
APPROPRIATION/BUDGET ACTIVITY OTHER PROCUREMENT, NAVY BA-4, ORDNANCE SUPPORT EQUIPMENT				P-1 ITEM NOMENCLATURE/SUBHEAD SURFACE ASW SUPPORT EQUIPMENT, (544900) 846B						
COST CODE	ELEMENT OF COST	IDENT CODE	TOTAL COST IN THOUSANDS OF DOLLARS							
			FY 1996		FY 1997		FY 1998		FY 1999	
			QTY	TOTAL COST	QTY	TOTAL COST	QTY	TOTAL COST	QTY	TOTAL COST
6B001	FIRE CONTROL ORDALTs			(421)		(663)		(594)		(981)
	UFCS MK 116 ORDALTs			205		372		314		586
	SURFACE SWITCHBOARD ORDALTs			31		-		-		-
	CP MK 309 ORDALTs			185		291		280		395
6B002	WEAPON CONTROL SUPPORT EQUIPMENT			(425)		(425)		(356)		(440)
	CP MK 309			75		75		63		80
	UFCS MK 116			350		350		293		360
6B004	TORPEDO TUBE ORDALTs			2,150		1,862		732		1,105
6B005	FCS SHIPBOARD TRAINING EQUIPMENT			200		300		167		223
6B007	TUBE/FC MK 50 INTEGRATION			320		320		251		334
6B011	SVTT MK 32 LAB SUPPORT EQUIPMENT			75		227		167		195
6B830	PRODUCTION ENGINEERING SUPPORT			519		479		262		282
6B860	FCS ACCEPTANCE T&E			267		267		84		150
6B900	CONSULTING SERVICES			300		491		210		300
6B5IN	FMP INSTALLATION OF EQUIPMENT			2,234		2,054		3,106		2,125
TOTAL OSD CONTROL				6,911		7,088		5,929		6,135

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ITEM NO. 163 PAGE NO. 4

Exhibit P-5 Weapons Systems Cost Analysis

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REQUIREMENTS STUDY - NOT-INSTALLED NONCONSUMABLES P-23B							DATE February 1997	
APPROPRIATION/BUDGET ACTIVITY OTHER PROCUREMENT NAVY OPN BA-4 ORDNANCE SUPPORT EQUIPMENT				P-1 ITEM NOMENCLATURE SURFACE ASW SUPPORT EQUIPMENT 846B				
ITEM/PROJECT UNIT	TOTAL IO / REQUIREMENT	QUANTITY ON HAND & NOT IN USE	QUANTITY IN USE	QUANTITY DUE IN WITH FY 96 & PRIOR FUNDS	QUANTITY DUE IN WITH FY 97 PROGRAM FUNDS	PLANNED BUDGET YEARS 98 PROCUREMENT	BALANCE	PHASING RATIONALE
6B001 FIRE CONTROL ORDALTs (O/A 16369)	14	0	0	14	0	0	0	PLANNED PHASING
6B005 FCS SHIPBOARD TRNG EQUIPMENT	11	0	0	11	0	0	0	PLANNED PHASING
COST CODE: 6B001								
SHIP CLASS	QTY	6B005						
FFG 36	1							
FFG 47	1	SHIP CLASS	QTY					
FFG 48	1							
FFG 50-55	6	DDG 993-996	4					
FFG 57	1	NSWC, DAHLGREN	2					
FFG 59	1	FLEASWSCH	1					
FFG 61	1	CG 52 - CG 55	4					
NUWC, KEYPORT	1	TOTAL	11					
FLEASWSCH	1							
TOTAL	14							

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BUDGET ITEM JUSTIFICATION SHEET DoD EXHIBIT P-40						February 1997		
APPROPRIATION/BUDGET ACTIVITY OTHER PROCUREMENT, NAVY/BA 4 - ORDNANCE SUPPORT EQUIPMENT					P-1 ITEM NOMENCLATURE ASW RANGE SUPPORT EQUIPMENT (846C)			
	FY 96	FY 97	FY 98	FY 99	FY 00	FY 01	FY02	FY03
<i>QUANTITY</i>								
<i>COST (IN MILLIONS)</i>	5.1	2.4	3.6	4.5	4.5	5.0	5.0	5.1
<p>This P-1 line provides for the procurement of training range and shore support equipment, proofing range equipment, weapon system/sensor accuracy equipment, and test and trials equipment. Equipment includes instrumentation for Fleet Operational Readiness Accuracy Check Sites (FORACS) and NUWC, KPT proofing ranges, support equipment required to conduct Fleet exercises at Navy ASW Training ranges, Weapon System Accuracy Trials (WSAT) test equipment, Sensor Accuracy Test (SAT) equipment, Ship ASW Readiness/Effectiveness Measuring (SHAREM) and Sonar Acoustic Target Source (SATS) equipment. Training and proofing ranges supported include Southern California Offshore Range (SCORE), Barking Sands Tactical Underwater Range/Barking Sands Underwater Range Extension (BARSTUR/BSURE), AUTEC, AFWTF (St. Croix), Nanoose, Quinault and Dabob Bay. FORACS ranges supported include Andros Island, Southern California, and Hawaii.</p> <p>6C001 - Weapon System/Sensor Accuracy Equipment: Funding will provide high power ESM targets, Universal Radar Moving Target Transponder, range communication systems, replacement of obsolete range computers, ship auto-tracking system, a missile defense radar target and a more accurate and reliable ship position tracking system. These upgrades are required to provide adequate range equipment for surface ship and submarine weapon systems and sensor accuracy testing.</p> <p>6C002 - Training Range Support Equipment: Funding provides for the procurement of shipboard tracking equipment, shop special purpose pinger test equipment, and the associated cables/mounting hardware required to track ships and submarines conducting Fleet exercises at the Navy training ranges. NAVSEA provides all of the Navy Underwater Ranges with this tracking equipment support, because the equipment must be compatible with NAVSEA designed and built underwater vehicles (i.e. ships, submarines, torpedoes, mines and sonars).</p>								
DD Form 2454, JUL 88				P-1 SHOP LIST ITEM NO 164		PAGE NO 1 Exhibit P-40 Budget Item Justification Sheet		

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BUDGET ITEM JUSTIFICATION SHEET DoD EXHIBIT P-40		February 1997
APPROPRIATION/BUDGET ACTIVITY OTHER PROCUREMENT, NAVY/BA 4 - ORDNANCE SUPPORT EQUIPMENT	P-1 ITEM NOMENCLATURE ASW RANGE SUPPORT (846C)	
<p>6C003 - Test and Trials Support Equipment: Funding will provide upgrade hardware for SATS in order to provide a test and calibration target for the SQQ-89I, SQS-53C, BQQ-5E and BSY-1 sonars.</p> <p>6C004 - Proofing Range Equipment: Funding provides for replacement and modernization of NUWC, KPT proofing range resources such as: Acoustic Noise Measuring Recording and Analysis System, Above Water Tracking System, RF and Underwater equipment, Sensor Accuracy Test (SAT) equipment, Ship ASW Readiness/Effectiveness Measuring (SHAREM) and Sonar Acoustic Target Source (SATS) equipment. Training and proofing ranges supported include SCORE, BARSTUR/BSURE, AUTECH, AFWTF (St. Croix), Nanoose, Quinault and Dabob Bay.</p> <p>Production support services will fund support efforts performed by a field activity or contractor during the production phase of these projects.</p>		
DD Form 2454, JUL 88	P-1 SHOP LIST ITEM NO 164	PAGE NO 2 Exhibit P-40 Budget Item Justification Sheet

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WEAPON SYSTEM COST ANALYSIS EXHIBIT (P-5)									February 1997	
APPROPRIATION/BUDGET ACTIVITY OPN/BA 4 - ORDNANCE SUPPORT EQUIPMENT					P-1 ITEM NOMENCLATURE ASW RANGE SUPPORT EQUIPMENT (846C)					
COST CODE	ELEMENT OF COST	ID CODE	TOTAL COST IN THOUSANDS OF DOLLARS							
			FY 96		FY 97		FY 98		FY 99	
			QTY	COST	QTY	COST	QTY	COST	QTY	COST
6C001	Weapon System/Sensor Accuracy Equip.			1155		300		699		957
6C002	Training Range Support Equipment			580		336		576		673
6C003	Test & Trial Support Equipment			373		204		234		246
6C004	Proofing Range Equipment			1597		926		904		1331
6C820	Consulting Services			309		125		307		334
6C830	Production Engineering			335		99		218		318
6C840	Quality Assurance			98		66		97		135
6C850	Product Improvement			489		260		400		428
6C860	Acceptance, Test & Evaluation			120		56		116		110
	TOTAL			5056		2372		3551		4532
			P-1 SHOP LIST ITEM NO 164		PAGE NO 3		UNCLASSIFIED CLASSIFICATION			

CLASSIFICATION: **UNCLASSIFIED**

BUDGET ITEM JUSTIFICATION SHEET P-40					DATE: February 1997			
APPROPRIATION/BUDGET ACTIVITY OTHER PROCUREMENT, NAVY BA-4:ORDNANCE SUPPORT EQUIPMENT					P-1 ITEM NOMENCLATURE EXPLOSIVE ORDNANCE DISPOSAL EQUIPMENT 74VN BLI # 5509			
	1996	1997	1998	1999	2000	2001	2002	2003
QUANTITY								
COST (In Millions)	\$9.5	\$6.1	\$7.5	\$8.7	\$9.2	\$9.7	\$9.9	\$8.5
<p>ITEM DESCRIPTION/JUSTIFICATION:</p> <p>The Navy is responsible for the management and execution of the Joint Service EOD unified procurement system as assigned by DOD Directive 5160.62. All procurement of EOD tools and equipment, both initial outfitting and replenishment, for all military services is made by the Navy. The Navy provides all procurement services. There is an annual average of 300 contracts for this material. Each military service funds its own hardware.</p> <p>VN001-NEW RSP EQUIPMENT: Initial outfitting of tools/equipment for increased allowances incident to correction of initial outfitting deficiencies and as required by EOD render-safe procedures.</p> <p>VN005-MATERIAL FOR NAVAL SCHOOL EXPLOSIVE ORDNANCE DISPOSAL (NAVSCOLEOD): Provides ordnance material to NAVSCOLEOD for Joint Service training.</p> <p>VN034-Initial outfit EOD NR: EOD Naval Reserve Units/Detachments require initial outfitting of equipment on the Allowance List as approved by CNO.</p> <p>VN041-NEUTRALIZATION CHARGE, MK 98: An explosive charge that will neutralize proud, moored, partially buried or buried mines.</p> <p>VN057-MK 32/35 ACCESSORY SET: Hardware which allows for mine neutralization mission capabilities for MK 7 and MK 4 MMS.</p> <p>VN058-MK 4 & MK 7 AMPHIBIOUS TASK FORCE (ATF): Provides initial outfitting of MK 4 & MK 7 MMS detachments to allow for forward deployment in support of very shallow water MCM operations.</p>								

BUDGET ITEM JUSTIFICATION SHEET P-40 (CONTINUED)		DATE: February 1997
APPROPRIATION/BUDGET ACTIVITY	P-1 ITEM NOMENCLATURE	
OP,N/4: ORDNANCE SUPPORT EQUIPMENT	EXPLOSIVE ORDNANCE DISPOSAL EQUIPMENT (74VN)	
VN059-EOD MOBILE UNIT ALLOWANCE: Initial outfitting of tool/equipment for increased allowances on the CNO approved allowance list..		
VN062-MMS SHIPBOARD: Initial outfitting of hardware and production of animal behaviors which allows the MK 4 and MK 7 MMS to operate on a shipboard platform from the sea.		
VN063-ADVANCED RADIOGRAPHIC SYSTEM (ARS): ARS will improve current EOD x-ray capabilities by providing a portable, enhanced real time image and reduce the EOD technicians vulnerability to UXOs and IEDs.		
VN064-CLASSIFIED PROJECT I: Procurement of developed classified items.		
VN065-MMS VERY SHALLOW WATER MINE COUNTERMEASURES (VSWMCM): This funding supports initial outfitting of hardware and animal behaviors required for the subject systems to operate in a limited hostile environment and enhance system survivability.		
VN066-VSW ACCESSORY SET- Procurement of hardware which allows for the neutralization of mines in the VSW region which are subject to tidal surge and elevated currents.		
VN830-PRODUCTION ENGINEERING: Review all technical data packages prior to procurement and provide procurement instruction to the procuring activity in support of the EOD unified procurement system. Provides production engineering support for all EOD and MMS production contracts.		
VN850-PRODUCT IMPROVEMENT: Engineering services to improve EOD/MMS Systems/Equipment in production to improve maintainability, utilize current technology and decrease cost.		
VN860-ACCEPTANCE, TEST & EVALUATION: Test, inspect, accept first articles and, on a 100% basis, the production quantity of EOD tools and equipment being procured. These tools are man-rated, and proper functioning of each item must be verified.		
VNTNG-INITIAL TRAINING: Provide training support packages which include curriculum material for Joint Service EOD and Marine Mammal systems equipment.		

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WEAPON SYSTEM COST ANALYSIS P-5								DATE: February 1997		
APPROPRIATION/BUDGET ACTIVITY OTHER PROCUREMENT, NA BA-4:ORDNANCE SUPPORT EQUI				P-1 ITEM NOMENCLATURE/SUBHEAD EXPLOSIVE ORDNANCE DISPOSAL EQUIPMENT 74VN						
COST CODE	ELEMENT OF COST	IDENT CODE	TOTAL COST IN THOUSANDS OF DOLLARS							
			FY 1996		FY 1997		FY 1998		FY 1999	
			QTY	TOTAL COS	QTY	TOTAL COS	QTY	TOTAL COS	QTY	TOTAL COST
	EXPLOSIVE ORDNANCE DISPOSAL (N85)									
VN001	NEW RSP EQUIPMENT	A		370		380		385		390
VN005	MATERIAL FOR NAVSCOLEOD	A		130		130		140		140
VN034	INITIAL OUTFIT EOD NR	A	1	480	1	497	1	438	1	439
VN041	NEUTRALIZATION CHG MK 98	A	577	2,885						
VN057	MK 32/35 ACCESSORY SET	A			253	1,460	256	1,464	98	568
VN058	MK 7 AMPHIBIOUS TASK FORCE	A		922						
VN059	EOD MU ALLOWANCE	A		2,550		1,018		1,840		1,974
VN062	MMS SHIPBOARD	A		657		1,188		988		849
VN063	ARS	B							111	1,600
VN064	CLASSIFIED PROJECT	A						200		
VN065	MMS VSWMCM	A						550		644
VN066	VSW ACCESSORY SET	A						305		410
VN830	PRODUCTION ENGINEERING	A		555		580		253		610
VN850	PRODUCT IMPROVEMENT	A		535		550		560		582
VN860	ACCEPTANCE, TEST & EVALUATION	A		270		270		280		290
VNTNG	INITIAL TRAINING	A		131		50		118		164
TOTAL				9,485		6,123		7,521		8,660

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FY 96 PRODUCTION SUPPORT LINE WILL FORWARD FINANCE 342K OF FY 98 REQUIREMENTS

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BUDGET PROCUREMENT HISTORY AND PLANNING										DATE	
P-5A										February 1997	
APPROPRIATION/BUDGET ACTIVITY					P-1 ITEM NOMENCLATURE				SUBHEAD		
OTHER PROCUREMENT, NAVY/BA-4:ORDNANCE SUPPORT EQUIPMENT					EXPLOSIVE ORDNANCE DISPOSAL EQUIPMENT				74VN		
COST CODE	LINE ITEM/ FISCAL YEAR	CONTRACTOR AND LOCATION	CONTRACT METHOD & TYPE	CONTRACTED BY	AWARD DATE	DATE OF FIRST DELIVERY	QUANTITY	UNIT COST (000)	SPECS AVAILABLE NOW	SPEC REV REQ'D	IF YES WHEN AVAILABLE
VN034											
1996	NAVEODTD	NDIAN HEAD, MD	WR	NAVSEA	03/96	03/97	1	480.0	YES	NO	
1997	NAVEODTD	NDIAN HEAD, MD	WR	NAVSEA	03/97	03/98	1	497.0	YES	NO	
1998	NAVEODTD	NDIAN HEAD, MD	WR	NAVSEA	03/98	03/99	1	438.0	YES	NO	
1999	NAVEODTD	NDIAN HEAD, MD	WR	NAVSEA	03/99	03/00	1	439.0	YES	NO	
VN041											
1996	NSWC IHDI	NDIAN HEAD, MD	WX	NAVSEA	02/96	02/97	577	5.0	YES	NO	
VN057											
1997	NRAD	SAN DIEGO, CA	WR	NAVSEA	02/97	02/98	253	5.77	YES	NO	
1998	NRAD	SAN DIEGO, CA	WR	NAVSEA	02/98	02/99	253	5.78	YES	NO	
1999	NRAD	SAN DIEGO, CA	WR	NAVSEA	02/99	02/00	98	5.79	YES	NO	
VN063											
1999	NAVEODTD	NDIAN HEAD, MD	WR	NAVSEA	02/99	06/99	111	14.4	YES	NO	
REMARKS											

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BUDGET ITEM JUSTIFICATION SHEET					DATE:			
P-40					FEBRUARY 1997			
APPROPRIATION/BUDGET ACTIVITY					P-1 ITEM NOMENCLATURE/SUBHEAD			
OTHER PROCUREMENT NAVY/BA4: ORDNANCE SUPPOR					BLI: 5518			
UNMANNED SEABORNE TARGETS/84VR								
	1996	1997	1998	1999	2000	2001	2002	2003
QUANTITY	6		8					
COST (In Millions)	\$4.2	\$0.0	\$4.3	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
<p>The Unmanned Seaborne Targets Program provides surface seaborne targets and target electronic augmentation systems for weapons systems test and evaluation and Fleet surface to surface and air to surface training. Target requirements include the 17m QST-35A and the High Speed Mobile Sea Target (HSMST) Mk1, the MK-42 Mod 0 Floating At Sea Target (FAST) and the Towed Trimaran, William Sled, and Improved Surface Towed Target (ISTT). Inventory objective changes based on Fleet usage.</p> <p>VR001 - The QST-35 SEPTAR, the primary powered surface target for weapons test and evaluation and Fleet training, simulates various surface threats.</p> <p>VR005, VR006 - The Fleet requires a High Speed Mobile Sea Targets (HSMST) MK1 and a higher speed HSMST MK2 for bombing and gunnery training.</p> <p>VR002, VR003, VR005, VR008 - The Fleet also requires low cost expendable moving targets and stationary targets towed to the operating site for surface, aerial gunnery and missile shots. Trimarans, HARM/IR target, Williams Sleds, and the ISTT with tow lines and retrieval systems meet these requirements. The FAST is a free floating radar reflective target developed as an open ocean training device for bombing and surface gunnery exercises. This program also procures seaborne target augmentation systems which include transponders (i.e. transmitters/receivers), radar reflectors, RF emitters and ground support equipment (GSE). Various electronic components provide the interface for the target control systems with the control stations/facilities for drone operations. RF emitters and radar reflectors enhance target threat replication and provide the required stimulus for anti-surface/radar weapons systems.</p>								

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WEAPON SYSTEM COST ANALYSIS EXHIBIT P-5								DATE: FEBRUARY 1997		
APPROPRIATION/BUDGET ACTIVITY OTHER PROCUREMENT, NAVY/ BA4: ORDNANCE SUPPORT EQUIPMENT				P-1 ITEM NOMENCLATURE/SUBHEAD UNMANNED SEABORNE TARGETS/84VR						
TOTAL COST IN THOUSANDS OF DOLLARS										
COST CODE	ELEMENT OF COST	IDENT CODE	FY 1996		FY 1997		FY 1998		FY 1999	
			QTY	TOTAL COST	QTY	TOTAL COST	QTY	TOTAL COST	QTY	TOTAL COST
VR001	QST-35	A		\$0		\$0		\$0		\$0
VR003	TOWED TARGETS	A		\$1,840		\$0		\$1,200		\$0
VR004	INSTRUMENTATION	A		\$618		\$0		\$600		\$0
VR005	HSMST MK1	A	6	\$1,080		\$0	8	\$1,503		\$0
VR008	MK-42 FLOATING AT SEA TARGET (I	A		\$0		\$0		\$190		\$0
VR830	PRODUCTION ENGINEERING	A		\$334		\$0		\$360		\$0
VR970	INTEGRATED LOGISTICS SUPPORT/	A		\$143		\$0		\$242		\$0
VR900	CONSULTING SERVICES	A		<u>\$190</u>		<u>\$0</u>		<u>\$176</u>		<u>\$0</u>
	TOTAL		6	\$4,205	0	\$0	8	\$4,271	0	\$0

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WEAPON SYSTEM COST ANALYSIS EXHIBIT P-5A										DATE FEBRUARY 1997	
APPROPRIATION/BUDGET ACTIVITY OTHER PROCUREMENT, NAVY BA4: ORDNANCE SUPPORT EQUIPMENT					P-1 ITEM NOMENCLATURE UNMANNED SEABORNE TARGETS				SUBHEAD 84VR		
COST CODE	LINE ITEM/ FISCAL YEAR	CONTRACTOR AND LOCATION	CONTRACT METHOD & TYPE	CONTRACTED BY	AWARD DATE	DATE OF FIRST DELIVERY	QUANTITY	UNIT COST (000)	SPECS AVAILABLE NOW	SPEC REV REQ'D	IF YES WHEN AVAILABLE
VR001	QST-35 SEPTAR FY95	WILLARD MARINE ANAHEIM CA.	FFP	NAVSEA	Sep-95	Feb-97	4	698.3	YES	NO	
VR005	HSMST MK1 FY96 FY98	NORTHPORT TBD	OPT C/FP	NAVSEA NAVSEA	May-96 Oct-97	May-97 Oct-98	6 8	180.0 187.9	YES YES	NO NO	
REMARKS											

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OTHER PROCUREMENT, NAVY BUDGET ITEM JUSTIFICATION SHEET P-40					DATE: FEBRUARY 1997			
APPROPRIATION/BUDGET ACTIVITY OPN / 4 - ORDNANCE SUPPORT EQUIPMENT					P-1 ITEM NOMENCLATURE ANTI-SHIP MISSILE DECOY SYSTEMS / 14VV - 5530			
	1996	1997	1998	1999	2000	2001	2002	2003
QUANTITY								
COST (In Millions)	\$2.4	\$23.6	\$24.7	\$22.4	\$21.3	\$17.5	\$17.4	\$18.0
<p>JUSTIFICATION: The Anti-Ship Missile Decoy Program covers a family of decoys and the equipment to deploy them. It is an essential element of the Anti-Ship Missile Defense (ASMD) tactics to counter the threat of enemy homing missiles. The program is funded under two subheads, this one covering launching systems and related equipment, and Shipboard Expendable Countermeasures (14VP) covering consumable decoys. Equipment funded under this line includes:</p> <p>MK 36 SYSTEM EXPANSION KITS/ORDALTS: MK 36 Expansion Kits (ORDALTS 15579/15589) are being procured for each ship currently equipped with a two- or four-launcher MK 36 system. The additional aft facing launchers increase decoy effectiveness against modern missile threats. The pending introduction of additional decoy types has resulted in an increased requirement for decoy launchers and ready service storage capacity. Accordingly, a program has been initiated to expand two- and four-launcher systems by installing two additional launchers and related equipment along with improvements to the fire control subsystem. Concurrently, existing 20 round Ready Service Lockers are replaced with a new 35 round locker. The larger lockers are also being installed as quickly as the equipment becomes available.</p> <p>NULKA: This line contains various equipment, subsystems, for a system which will provide the capability to defeat the effectiveness of hostile Anti-Ship cruise missiles. Currently Nulka is scheduled to be installed on the following ship classes: DD 963, DDG 51, CG 47, FFG, LSD 41, LHD, LHA, LCC 19, DDG 993 and AOE 6. The installation will be performed at a pier side availability. No ROH required.</p> <p>(a) Decoys and launching system equipment. An active off-board Anti-Ship missile decoy system.</p> <p>(b) Production Engineering Support.</p> <p>EQUIPMENT INSTALLATION: Funding is for the installation of equipment, including Fleet Modernization Program Installs, and installation of equipment at shore facilities.</p> <p>Nulka is a joint program with Australia, who have made the decision to proceed with it's outfitting into their combatants. Initial Operational Testing of Nulka was completed in December 1992, with COMOPTEVFOR recommending limited fleet introduction and continued development. Nulka is currently in the final stage of development with a initial production decision for the decoy planned for Feb 1997 after tests to confirm the final design are completed. Production contract award for the decoy will be made in Feb 1997. Nulka will undergo TECHEVAL and OPEVAL in April 1997 with a launch system production decision planned to support a May 1997 contract award. Integration of Nulka with SSDS is planned to be completed in time to be evaluated in FY 98 during FOT&E.</p> <p>The budget reflects the transfer of Design Services into the appropriate equipment P-1 line item in accordance with full funding policy FY 98 and out.</p> <p>Program Element: 0604755N Project Number: U2190</p>								

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WEAPON SYSTEM COST ANALYSIS P-5									DATE: February 1997		
APPROPRIATION/BUDGET ACTIVITY				P-1 ITEM NOMENCLATURE/SUBHEAD							
OPN/4 - ORDNANCE SUPPORT EQUIPMENT				ANTI-SHIP MISSILE DECOY SYSTEMS / 14VV							
COST CODE	ELEMENT OF COST	IDENT CODE	TOTAL COST IN THOUSANDS OF DOLLARS								
			FY 1996		FY 1997		FY 1998		FY 1999		
			QTY	TOTAL COST	QTY	TOTAL COS	QTY	TOTAL COS	QTY	TOTAL COST	
VV001	NULKA SYSTEMS	B			11	5,000	20	6,260	20	6,400	
VV001	NULKA DECOYS	B			52	14,920	88	16,984	65	12,805	
VV830	Production Engineering					1,565		128		242	
VVINS	Installation			2,403		2,121		1,160		2,653	
VVDSA	Design Systems Acquisition							164		278	
TOTAL					2,403		23,606		24,696		22,378

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BUDGET PROCUREMENT HISTORY AND PLANNING EXHIBIT										DATE	
P-5A										FEBRUARY 1997	
APPROPRIATION/BUDGET ACTIVITY					P-1 ITEM NOMENCLATURE				SUBHEAD		
OPN / 4 - ORDNANCE SUPPORT EQUIPMENT					ANTI-SHIP MISSILE DECOY LAUNCHING SYSTEM				14VV		
COST CODE	LINE ITEM/ FISCAL YEAR	CONTRACTOR AND LOCATION	CONTRACT METHOD & TYPE	CONTRACTED BY	AWARD DATE	DATE OF FIRST DELIVERY	QUANTITY	UNIT COST (000)	SPECS AVAILABLE NOW	SPEC REV REQ'D	IF YES WHEN AVAILABLE
VV001	FY 1997 (Systems)	Sippican, MASS	C/FP	NAVSEA	5/97	2/98	11	500	YES	NO	N/A
	FY 1997 (Decoys)	BAeA, Australia	MY/FP	NAVSEA	2/97	11/97	52	189	YES	NO	N/A
VV001	FY 1998 (Systems)	TBD(competative)	C/FP	NAVSEA	5/98	2/99	20	313	YES	NO	N/A
	FY 1998 (Decoys)	BAeA, Australia	MY/FP	NAVSEA	2/98	11/98	88	193	YES	NO	N/A
VV001	FY 1999 (Systems)	TBD(competative)	C/FP	NAVSEA	5/99	2/00	20	320	YES	NO	N/A
	FY 1999 (Decoys)	BAeA, Australia	MY/FP	NAVSEA	2/99	11/99	65	197	YES	NO	N/A
REMARKS											

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ITEM NO. PAGE NO.

CLASSIFICATION:

UNCLASSIFIED

CLASSIFICATION: UNCLASSIFIED

P3A		INDIVIDUAL MODIFICATION																											
MODIFICATION TITLE:		NULKA																											
MODELS OF SYSTEM AFFECTED:		NONE. ORIGINAL INSTALLATIONS.																											
DESCRIPTION/JUSTIFICATION:		LAUNCHING SYSTEM MODIFICATIONS TO SUPPORT NULKA DECOY																											
DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES:																													
		FY 96															TO		TO										
		QTY	& Prior	QTY	FY 97	QTY	FY98	QTY	FY99	QTY	FY00	QTY	FY01	QTY	FY02	QTY	FY03	QTY	COMP	COMP									
																	TOTAL	TOTAL											
																	QTY	COST											
FINANCIAL PLAN (IN MILLIONS)																													
RDT&E		3/58	102.5	0	6.1	0	8.2	0	8.2	0	7.0	0	5.6	0	3.6	0	6.5	0	0.0	3/58	45.2								
PROCUREMENT																											127.8		
QUANTITY																											31.6		
INSTALLATION KITS																											0		
INSTALLATION KITS NONRECURRING																											0		
EQUIPMENT																											0		
EQUIPMENT NONRECURRING																											0		
ENGINEERING CHANGE ORDERS																											0		
UNIT COST DATA FOR EQUIPMENT																											0		
TRAINER																											1		
SSDS TEST SHIP																												1	
OTHER (DECOYS)																												502	
INTERIM CONTRACTOR SUPPORT																												0	
INSTALLATION OF HARDWARE																													
FY96 EQUIPMENT & PRIOR																												0	
FY97 EQUIPMENT																												11	
FY98 EQUIPMENT																												20	
FY99 EQUIPMENT																												20	
FY00 EQUIPMENT																												19	
FY01 EQUIPMENT																												19	
FY02 EQUIPMENT																												7	
FY03 EQUIPMENT																												0	
TO COMPLETE																												0	
TOTAL INSTALLATION COST																												96	
TOTAL PROCUREMENT COST																													127.60
TOTAL COST																													275.3
METHOD OF IMPLEMENTATION:		ORDALT BY AIT																											
CONTRACT DATE:		PRIOR YEAR N/A																											
PRODUCTION DELIVER DATE:		PRIOR YEAR N/A																											
		ADMINISTRATIVE LEAD TII 6 MOS																											
		CURRENT YEAR: N/A BUDGET YEAR: 5/97																											
		BUDGET YEAR 2: 5/98																											
		CURRENT YEAR: N/A BUDGET YEAR: 2/98																											
		BUDGET YEAR 2: 2/99																											
INSTALLATION SCHEDULE:																													
INPUT =====>		FY96	FY97	FY98	FY99	FY00	FY01	FY02	FY03	TC											TOTAL								
			1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4																		
FY 96 & PRIOR																													
FY 97																												11	
FY 98																												18	
FY 99																												19	
FY 00																												18	
FY 01																												20	
FY 02																												10	
FY 03																												0	
TC																												0	
Total																												96	
OUTPUT =====>		FY96	FY97	FY98	FY99	FY00	FY01	FY02	FY03	TC											TOTAL								
			1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4							
FY 96 & PRIOR																													
FY 97																													11
FY 98																													20
FY 99																													20
FY 00																													19
FY 01																													19
FY 02																													7
FY 03																													0
TC																													0
Total																													96
*QTY (1) TRAINER PROCUREMENT WITH INSTALL COST INCLUDED; QTY (1) SSDS TEST SHIP INSTALL UNDER P-1 523900 FMP INSTALL.																													
NOTE: INVENTORY OBJECTIVE FOR THIS ITEM IS 96																													
P-3A																													

*QTY (1) TRAINER PROCUREMENT WITH INSTALL COST INCLUDED; QTY (1) SSDS TEST SHIP INSTALL UNDER P-1 523900 FMP INSTALL.

NOTE: INVENTORY OBJECTIVE FOR THIS ITEM IS 96

P-3A

CLASSIFICATION: UNCLASSIFIED

P3A		INDIVIDUAL MODIFICATION																			
MODIFICATION TITLE:		MK 36 DECOY LAUNCHING SYSTEM EXPANSION																			
MODELS OF SYSTEM AFFECTED:		MK 36 Mod 1/2/5/6																			
DESCRIPTION/JUSTIFICATION:		Installation provides improved decoy placement capability and additional ready service storage.																			
DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES:		MK 36 DLS Expansion is being installed in accordance with approved SHIPALTs.																			
		FY 96														TO		TO			
																COMP		TOTAL			
																QTY		COST			
																QTY		COST			
FINANCIAL PLAN (IN MILLIONS)																					
BDT&E																					
PROCUREMENT		6	1.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6	1.0	
QUANTITY																			0	0.0	
INSTALLATION KITS																			0	0.0	
INSTALLATION KITS NONRECURRING																			0	0.0	
EQUIPMENT		6	1.0																6	1.0	
EQUIPMENT NONRECURRING																			0	0.0	
ENGINEERING CHANGE ORDERS																			0	0.0	
DATA																			0	0.0	
TRAINING EQUIPMENT																			0	0.0	
SUPPORT EQUIPMENT																			0	0.0	
OTHER																			0	0.0	
INTERIM CONTRACTOR SUPPORT																			0	0.0	
INSTALLATION OF HARDWARE																					
FY96 EQUIPMENT & PRIOR		2	3.85	3	2.16	1	0.06	0	0.00	0	0.00	0	0.00	0	0.00	0	0	0	0.0	6	6.07
																			0	0.0	
FY97 EQUIPMENT																			0	0.0	
FY98 EQUIPMENT																			0	0.0	
FY99 EQUIPMENT																			0	0.0	
FY00 EQUIPMENT																			0	0.0	
FY01 EQUIPMENT																			0	0.0	
FY02 EQUIPMENT																			0	0.0	
TO COMPLETE																			0	0.0	
TOTAL INSTALLATION COST		3.85	2.16		0.06		0.00		0		0.00		0.00		0.00		0.0		0.0	6.07	
TOTAL PROCUREMENT COST		1.0	0.0		0.0		0.0		0.0		0.0		0.0		0.0		0.0		0.0	1.0	
TOTAL COST		1.0	2.16		0.06		0.00		0.00		0.00		0.00		0.00		0.0		0.0	7.07	
METHOD OF IMPLEMENTATION:		SHIPALT																			
CONTRACT DATE:		PRIOR YEAR:				ADMINISTRATIVE LEAD TIME:				6				PRODUCTION LEAD TIME:				6			
PRODUCTION DELIVER DATE:		PRIOR YEAR:				CURRENT YEAR:				BUDGET YEAR:				BUDGET YEAR 2:							
INSTALLATION SCHEDULE:																					
INPUT =====>		<u>FY96</u>	<u>FY97</u>	<u>FY98</u>	<u>FY99</u>	<u>FY00</u>	<u>FY01</u>	<u>FY02</u>	<u>FY03</u>	<u>TC</u>	<u>TOTAL</u>										
			1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4										
FY 96 & Prior		00,01,00,01	01,00,02,00	00,00,01,00							6										
FY 97											0										
FY 98											0										
FY 99											0										
FY 00											0										
FY 01											0										
FY 02											0										
FY 03											0										
TC											0										
OUTPUT =====>		<u>FY 96</u>	<u>FY97</u>	<u>FY98</u>	<u>FY99</u>	<u>FY00</u>	<u>FY01</u>	<u>FY02</u>	<u>FY03</u>	<u>TC</u>	<u>TOTAL</u>										
			1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4										
FY 96 & Prior		00,00,01,00	002,00,00,02	00,00,00,01		00,01,00,00					6										
FY 97											0										
FY 98											0										
FY 99											0										
FY 00											0										
FY 01											0										
FY 02											0										
FY 03											0										
TC											0										

P-3A

CLASSIFICATION: UNCLASSIFIED

DD Form 2445, JUL 87

Previous editions are obsolete

P-1 SHOPPING LIST

A = CONTRACT AWARD

NAVMAT FORM 7110/4 (REVISED 11/77)

UNCLASSIFIED

CLASSIFICATION: UNCLASSIFIED

DD Form 2445, JUL 87

Previous editions are obsolete

P-1 SHOPPING LIST

A = CONTRACT AWARD

CLASSIFICATION:

UNCLASSIFIED

TIME PHASED REQUIREMENTS SCHEDULE (SUPPLEMENT SHEET-INSTALLATION DATA) P-23A												DATE FEBRUARY 1997			
APPROPRIATION/BUDGET ACTIVITY OPN / 4 - ORDNANCE SUPPORT EQUIPMENT								P-1 ITEM NOMENCLATURE/PROJECT UNIT ANTI-SHIP MISSILE DECOY SYSTEMS / NULKA							
1ST QTR		2ND QTR		3RD QTR		4TH QTR		1ST QTR		2ND QTR		3RD QTR		4TH QTR	
E.I./L	QTY	E.I./L	QTY	E.I./L	QTY	E.I./L	QTY	E.I./L	QTY	E.I./L	QTY	E.I./L	QTY	E.I./L	QTY
FY 1996								1997							
FY 1998								1999							
		DD-963 cl LHD cl	2 1	FFG-7 cl LHD cl	2 1	LSD-41 cl	3	LSD-41 cl	5	DD-963 cl	5	LHD cl LHA cl	2 2	CG-47 DDG-51 cl LSD-41 cl	2 1 1

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CLASSIFICATION:

UNCLASSIFIED

TIME PHASED REQUIREMENTS SCHEDULE (SUPPLEMENT SHEET-INSTALLATION DATA) P-23A												DATE FEBRUARY 1997			
APPROPRIATION/BUDGET ACTIVITY OPN / 4 - ORDNANCE SUPPORT EQUIPMENT								P-1 ITEM NOMENCLATURE/PROJECT UNIT ANTI-SHIP MISSILE DECOY SYSTEMS / NULKA							
1ST QTR		2ND QTR		3RD QTR		4TH QTR		1ST QTR		2ND QTR		3RD QTR		4TH QTR	
E.I./L	QTY	E.I./L	QTY	E.I./L	QTY	E.I./L	QTY	E.I./L	QTY	E.I./L	QTY	E.I./L	QTY	E.I./L	QTY
FY 2000								FY 2001							
LHD cl LHA cl	2 3	FFG-7 cl	5	CG-47 cl DDG-51 cl	3 2	DD-963 cl DDG-51 cl	3 1	FFG-7 cl LSD-41 cl	4 1	CG-47 cl	5	DDG-51 cl	5	CG-47 cl DDG-51 cl	2 1
FY 2002								FY 2003							
CG-47 cl DDG-51 cl	2 3	DDG-51 cl DD-963 cl	2 3	DD-963 cl CG-47 cl	3 2	CG-47 cl DD-963 cl	3 2	CG-47 cl DD-963 cl	3 2			DD-993 cl	3	DDG-51 cl	2

P-1 SHOPPING LIST

CLASSIFICATION:

ITEM NO.

PAGE NO.

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UNCLASSIFIED

UNCLASSIFIED

BUDGET ITEM JUSTIFICATION SHEET P-40					DATE: February 1997			
APPROPRIATION/BUDGET ACTIVITY OTHER PROCUREMENT, NAVY/BA:4 ORDNANCE SUPPORT					P-1 ITEM NOMENCLATURE INDUSTRIAL FACILITIES-CAL EQUIP (84VZ)			
	1996	1997	1998	1999	2000	2001	2002	2003
QTY								
COST								
\$M	\$ 5.3	\$ 4.0	\$ 1.4	\$ 1.1	\$ 1.0	\$ 1.1	\$ 1.1	\$ 1.1
<p>This line item provides funding for capital type rehabilitation projects at five (5) government-owned, contractor- operated plants for weapon systems such as the MK 41 Vertical Launching System, MK 45 Gun Mounts, MK 13/26 Launching Systems MK 13/26 Launching Systems, Sonar Bow Domes, and PHALANX. Federal Acquisition Regulation Part 52.245-7 specifies facilities use contracts require government funding of capital type rehabilitation projects to support and maintain these facilities. These plants have an average age of 45 years and lack of proper maintenance will severely limit capabilities to maintain scheduled production rates and overall productivity. The following estimates are for capital type rehabilitation areas separated to reflect environmental, safety, energy conservation and major repairs.</p> <p>ENVIRONMENTAL: Provides funds to eliminate environmental deficiencies in compliance with local, state, and federal regulations. These regulations mandate requirements which must be met if plant shutdowns, criminal liability, and severe financial penalties are to be avoided.</p> <p>SAFETY: Provides funds to eliminate safety deficiencies in compliance with local, state, and federal OSHA regulations. These regulations mandate requirements which must be met if plant shutdowns and severe financial penalties are to be avoided.</p> <p>ENERGY CONSERVATION MANAGEMENT: Provides funds for reducing energy consumption as mandated by Congress in 1993.</p> <p>MAJOR REPAIR: Provides funds for critical upgrades to maintain high liability areas such as fire and security systems, roofs, boilers, electrical distribution systems, bridge crane systems, and other structural repairs essential to maintain the industrial integrity of the plant.</p>								

UNCLASSIFIED

UNCLASSIFIED

WEAPON SYSTEMS COST ANALYSIS EXHIBIT								DATE:		
P-5								February 1997		
APPROPRIATION/BUDGET ACTIVITY					P-1 ITEM NOMENCLATURE/SUBHEAD					
OPN BA-4 ORDNANCE SUPPORT EQUIPMENT					INDUSTRIAL FACILITIES-CAL EQUIP (84VZ)					
COST CODE	ELEMENT OF COST	IDENT CODE	TOTAL COST IN THOUSANDS OF DOLLARS							
			FY 1996		FY 1997		FY 1998		FY 1999	
			QTY	TOTAL COST	QTY	TOTAL COST	QTY	TOTAL COST	QTY	TOTAL COST
VZ100	SURFACE SHIPS(N86)	A		5278		4047		1373		1060
	Environmental	A		(1684)		(1335)		(350)		(292)
	Safety	A		(572)		(347)		(199)		(121)
	Energy Conservation	A		(1800)		(1505)		(489)		(541)
	Major Repair	A		(1222)		(860)		(335)		(106)
	TOTAL			5278		4047		1373		1060

P-1 SHOPPING LIST

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EXHIBIT P-40
UNCLASSIFIED

UNCLASSIFIED

EXHIBIT P-25, PRODUCTION SUPPORT AND INDUSTRIAL FACILITIES COST ANALYSIS							DATE: FEBRUARY 1997			
APPROPRIATION/BUDGET ACTIVITY OTHER PROCUREMENT, NAVY/BA:4 ORDNANCE SUPPORT							P-1 ITEM NOMENCLATURE INDUSTRIAL FACILITIES-CAL EQUIP (84VZ)			
ANNUAL CAPACITY BEFORE PROJECT (1-8-5)							ANNUAL CAPACITY AFTER PROJECT (1-8-5)			
FACILITY NAME: NIROP FRIDLEY, MN; Operated by UNITED DEFENSE, L.P.			LOCATION: FRIDLEY, MINNESOTA				TYPE: GOCO			
COST ELEMENTS \$M	1996	1997	1998	1999	2000	2001	2002	2003	To Complete	Total
Construction										
Equipment										
Equipment Install										
Contract Support										
Corps of Engrs										
Other	3.300	2.000	0.750	0.500	0.960	0.550	0.550	0.550		9.160
Total Fac Costs										
Other Prove-out										
MILCON										

PROJECT DESCRIPTION:
This line item provides funding for capital type rehabilitation projects under categories outlined below for NIROP Fridley, MN; operated by United Defense, L.P.

ENVIRONMENTAL : Provides funds to eliminate environmental deficiencies in compliance with local, state, and federal regulations.
These regulations mandate requirements which must be met if plant shutdowns, criminal liability, and severe financial penalties are to be avoided.

SAFETY: Provides funds to eliminate safety deficiencies in compliance with local, state, and federal OSHA regulations.
These regulations mandate requirements which must be met if plant shutdowns and severe financial penalties are to be avoided.

ENERGY CONSERVATION MANAGEMENT: Provides funds for reducing energy consumption as mandated by Congress in 1993.

MAJOR REPAIR: Provides funds for critical upgrades to maintain high liability areas such as fire and security systems, roofs, boilers, electrical distribution systems, bridge crane systems, and other structural repairs essential to maintain the industrial integrity of the plant.

MILESTONES:
All projects will be completed within 18 months from contract award date.

UNCLASSIFIED

EXHIBIT P-25, PRODUCTION SUPPORT AND INDUSTRIAL FACILITIES COST ANALYSIS							DATE: FEBRUARY 1997			
APPROPRIATION/BUDGET ACTIVITY OTHER PROCUREMENT, NAVY/BA:4 ORDNANCE SUPPORT							P-1 ITEM NOMENCLATURE INDUSTRIAL FACILITIES-CAL EQUIP (84VZ)			
ANNUAL CAPACITY BEFORE PROJECT (1-8-5)							ANNUAL CAPACITY AFTER PROJECT (1-8-5)			
FACILITY NAME: NIROP PITTSFIELD, MA; Operated by GENERAL DYNAMICS				LOCATION: PITTSFIELD, MASSACHUSETTS			TYPE: GOCO			
COST ELEMENTS \$M	1996	1997	1998	1999	2000	2001	2002	2003	To Complete	Total
Construction										
Equipment										
Equipment Install										
Contract Support										
Corps of Engrs										
Other	1.000	2.000	0.650	0.600	0.040	0.550	0.550	0.550		5.940
Total Fac Costs										
Other Prove-out										
MILCON										

PROJECT DESCRIPTION:
This line item provides funding for capital type rehabilitation projects under categories outlined below for NIROP PITTSFIELD, MA; Operated by GENERAL DYNAMICS.

ENVIRONMENTAL : Provides funds to eliminate environmental deficiencies in compliance with local, state, and federal regulations.
These regulations mandate requirements which must be met if plant shutdowns, criminal liability, and severe financial penalties are to be avoided.

SAFETY: Provides funds to eliminate safety deficiencies in compliance with local, state, and federal OSHA regulations.
These regulations mandate requirements which must be met if plant shutdowns and severe financial penalties are to be avoided.

ENERGY CONSERVATION MANAGEMENT: Provides funds for reducing energy consumption as mandated by Congress in 1993.

MAJOR REPAIR: Provides funds for critical upgrades to maintain high liability areas such as fire and security systems, roofs, boilers, electrical distribution systems, bridge crane systems, and other structural repairs essential to maintain the industrial integrity of the plant.

MILESTONES:
All projects will be completed within 18 months from contract award date.

UNCLASSIFIED

EXHIBIT P-25, PRODUCTION SUPPORT AND INDUSTRIAL FACILITIES COST ANALYSIS							DATE: FEBRUARY 1997			
APPROPRIATION/BUDGET ACTIVITY OTHER PROCUREMENT, NAVY/BA:4 ORDNANCE SUPPORT							P-1 ITEM NOMENCLATURE INDUSTRIAL FACILITIES-CAL EQUIP (84VZ)			
ANNUAL CAPACITY BEFORE PROJECT (1-8-5)							ANNUAL CAPACITY AFTER PROJECT (1-8-5)			
FACILITY NAME: NWIRP BEDFORD, MA; Operated by RAYTHEON CORPORATION							LOCATION: BEDFORD, MASSACHUSETTS			
TYPE: GOCO										
COST ELEMENTS \$M	1996	1997	1998	1999	2000	2001	2002	2003	To Complete	Total
Construction										
Equipment										
Equipment Install										
Contract Support										
Corps of Engrs										
Other	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000		0.000
Total Fac Costs										
Other Prove-out										
MILCON										

PROJECT DESCRIPTION:

This line item provides funding for capital type rehabilitation projects under categories outlined below for NWIRP BEDFORD, MA; Operated by RAYTHEON CORPORATION.

ENVIRONMENTAL : Provides funds to eliminate environmental deficiencies in compliance with local, state, and federal regulations.

These regulations mandate requirements which must be met if plant shutdowns, criminal liability, and severe financial penalties are to be avoided.

SAFETY: Provides funds to eliminate safety deficiencies in compliance with local, state, and federal OSHA regulations.

These regulations mandate requirements which must be met if plant shutdowns and severe financial penalties are to be avoided.

ENERGY CONSERVATION MANAGEMENT: Provides funds for reducing energy consumption as mandated by Congress in 1993.

MAJOR REPAIR: Provides funds for critical upgrades to maintain high liability areas such as fire and security systems, roofs, boilers, electrical distribution systems, bridge crane systems, and other structural repairs essential to maintain the industrial integrity of the plant.

MILESTONES:

All projects will be completed within 18 months from contract award date.

UNCLASSIFIED

EXHIBIT P-25, PRODUCTION SUPPORT AND INDUSTRIAL FACILITIES COST ANALYSIS							DATE: FEBRUARY 1997			
APPROPRIATION/BUDGET ACTIVITY OTHER PROCUREMENT, NAVY/BA:4 ORDNANCE SUPPORT							P-1 ITEM NOMENCLATURE INDUSTRIAL FACILITIES-CAL EQUIP (84VZ)			
ANNUAL CAPACITY BEFORE PROJECT (1-8-5)							ANNUAL CAPACITY AFTER PROJECT (1-8-5)			
FACILITY NAME: NWIRP BRISTOL, TN; Operated by RAYTHEON CORPORATION				LOCATION: BRISTOL, TN			TYPE: GOCO			
COST ELEMENTS \$M	1996	1997	1998	1999	2000	2001	2002	2003	To Complete	Total
Construction										
Equipment										
Equipment Install										
Contract Support										
Corps of Engrs										
Other	1.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000		1.000
Total Fac Costs										
Other Prove-out										
MILCON										

PROJECT DESCRIPTION:
This line item provides funding for capital type rehabilitation projects under categories outlined below for NWIRP BRISTOL,TN; Operated by RAYTHEON CORPORATION.

ENVIRONMENTAL : Provides funds to eliminate environmental deficiencies in compliance with local, state, and federal regulations.
These regulations mandate requirements which must be met if plant shutdowns, criminal liability, and severe financial penalties are to be avoided.

SAFETY: Provides funds to eliminate safety deficiencies in compliance with local, state, and federal OSHA regulations.
These regulations mandate requirements which must be met if plant shutdowns and severe financial penalties are to be avoided.

ENERGY CONSERVATION MANAGEMENT: Provides funds for reducing energy consumption as mandated by Congress in 1993.

MAJOR REPAIR: Provides funds for critical upgrades to maintain high liability areas such as fire and security systems, roofs, boilers, electrical distribution systems, bridge crane systems, and other structural repairs essential to maintain the industrial integrity of the plant.

MILESTONES:
All projects will be completed within 18 months from contract award date.

UNCLASSIFIED

EXHIBIT P-25, PRODUCTION SUPPORT AND INDUSTRIAL FACILITIES COST ANALYSIS							DATE: FEBRUARY 1997			
APPROPRIATION/BUDGET ACTIVITY OTHER PROCUREMENT, NAVY/BA:4 ORDNANCE SUPPORT							P-1 ITEM NOMENCLATURE INDUSTRIAL FACILITIES-CAL EQUIP (84VZ)			
ANNUAL CAPACITY BEFORE PROJECT (1-8-5)							ANNUAL CAPACITY AFTER PROJECT (1-8-5)			
FACILITY NAME: BOW DOME FACILITY; Operated by HITCO TECHNOLOGIES					LOCATION: LONG BEACH, CA		TYPE: GOCO			
COST ELEMENTS \$M	1996	1997	1998	1999	2000	2001	2002	2003	To Complete	Total
Construction										
Equipment										
Equipment Install										
Contract Support										
Corps of Engrs										
Other	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000		0.000
Total Fac Costs										
Other Prove-out										
MILCON										

PROJECT DESCRIPTION:
This line item provides funding for capital type rehabilitation projects under categories outlined below for BOW DOME FACILITY; Operated by HITCO TECHNOLOGIES, Long Beach, CA.

ENVIRONMENTAL : Provides funds to eliminate environmental deficiencies in compliance with local, state, and federal regulations.
These regulations mandate requirements which must be met if plant shutdowns, criminal liability, and severe financial penalties are to be avoided.

SAFETY: Provides funds to eliminate safety deficiencies in compliance with local, state, and federal OSHA regulations.
These regulations mandate requirements which must be met if plant shutdowns and severe financial penalties are to be avoided.

ENERGY CONSERVATION MANAGEMENT: Provides funds for reducing energy consumption as mandated by Congress in 1993.

MAJOR REPAIR: Provides funds for critical upgrades to maintain high liability areas such as fire and security systems, roofs, boilers, electrical distribution systems, bridge crane systems, and other structural repairs essential to maintain the industrial integrity of the plant.

MILESTONES:
All projects will be completed within 18 months from contract award date.

CLASSIFICATION: UNCLASSIFIED					DATE: FEBRUARY 1997				
BUDGET ITEM JUSTIFICATION SHEET									
APPROPRIATION/BUDGET ACTIVITY				P-40		P-1 ITEM NOMENCLATURE			
OTHER PROCUREMENT, NAVY BA-4 SUPPORT EQUIPMENT				STOCK SURVEILLANCE EQUIPMENT					
QUANTITY	<u>FY 1996</u>	<u>FY 1997</u>	<u>FY 1998</u>	<u>FY 1999</u>	<u>FY 2000</u>	<u>FY 2001</u>	<u>FY 2002</u>	<u>FY 2003</u>	
COST (in millions)	1.4	1.4	1.3	1.5	1.6	1.6	1.6	1.7	
<p>These funds are to procure test systems and equipment in support of the NAVSEA Quality Evaluation Program (O&MN). The purpose of this program is to (1) determine, through stock surveillance, the safety, reliability, readiness and service and shelf life of Navy and Marine Corps weapons and weapon systems, (2) determine extent and cause of material degradation, and (3) analyze the performance and effectiveness of the weapon systems through stockpile to target sequence tests.</p> <p>The test equipment is for evaluations of in-service weapons such as mines, gun ammunition, missiles, and torpedoes and will be located at NAVSEA activities. Requirements for test equipment come from a need to replace obsolete or irreparable equipment or to acquire new or expanded test capability when new or modified weapons enter the stockpile, or when new evaluation techniques or processes are needed.</p> <p>The equipment is generally "one of a kind" procurement and is used to support the generic ordnance types displayed in the P-5 exhibit.</p>									

CLASSIFICATION: UNCLASSIFIED

DATE: FEBRUARY 1997

WEAPON SYSTEMS COST ANALYSIS**APPROPRIATION/BUDGET ACTIVITY****P-5****P-1 ITEM NOMENCLATURE/
SUBHEAD**OTHER PROCUREMENT, NAVY
BA-4 ORDNANCE SUPPORT EQUIPMENTSTOCK SURVEILLANCE
EQUIPMENT 84V1

COST CODE	ELEMENT OF COST	IDENT CODE	QTY	FY 1996 TOTAL COST	QTY	FY 1997 TOTAL COST	QTY	FY 1998 TOTAL COST	QTY	FY 1999 TOTAL COST
V1001	SURFACE SHIPS (N86)									
	Gun Ammunition Test Equipment			363		308		295		350
	Pyro/Demo Test Equipment			247		311		313		300
	Missile Test Equipment			225		327		203		298
	MC Ammunition Test equipment			330		130		172		257
	Mine Test Equipment			275		332		309		321
	Torpedo Test Equipment			0		0		0		0
	TOTAL			1440		1408		1292		1526

CLASSIFICATION:

UNCLASSIFIED

BUDGET ITEM JUSTIFICATION SHEET P-40					DATE: February 1997			
APPROPRIATION/BUDGET ACTIVITY OTHER PROCUREMENT, NAVY (OPN) BA-4 ORDNANCE SUPPORT EQUIPMENT					P-1 ITEM NOMENCLATURE PYROTECHNIC AND DEMOLITION (SOF) - LI 5621			
	FY 1996	FY 1997	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003
QUANTITY								
COST (In Millions)	\$9.4	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0

*
FY97 and beyond budgeted in the P-1 Engagement Systems Support # 151

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CLASSIFICATION:

UNCLASSIFIED
BUDGET ITEM JUSTIFICATION SHEET
P-40
DATE:
FEBRUARY 1997
APPROPRIATION/BUDGET ACTIVITY
OTHER PROCUREMENT, NAVY
BA-4: ORDNANCE SUPPORT EQUIPMENT
P-1 ITEM NOMENCLATURE
FLEET MINE SUPPORT (74VT)

	1996	1997	1998	1999	2000	2001	2002	2003
QUANTITY								
COST (In Millions)								
	\$6.0	\$5.3	\$5.3	\$5.4	\$5.6	\$5.8	\$5.9	\$6.1

ITEM DESCRIPTION/JUSTIFICATION:

The Fleet Mine Support program provides for procurement of material and production support for readiness of all mines in stockpile. This includes both the service mine program and the Mine Exercise and Training (MET) Program in accordance with OPNAVNOTE C8550.

A service mine is an explosive undersea weapon for use against combat targets. It consists of an explosive loaded case, mine arming/firing actuation components and explosive initiators. Quantities and asset readiness objectives are described in OPNAVINST C8550.5M.

The requirements for the MET program are specified in OPNAVNOTE C8550. This program has two distinct facets: one supports the exercising of aircraft and submarine mine delivery forces to ensure delivery proficiency and the second supports the proficiency training of Surface and Airborne Mine Countermeasures (MCM) forces.

The material inventory involved in the Fleet Mine Support program is centrally managed by Naval Ordnance Command Inventory Management Systems Division for 6T-Cognizance Items.

PROGRAM FUNDS WILL BE USED TO PROVIDE THE FOLLOWING:

A. Production engineering support for mine assembly and loading, proof and test of mine components delivered from procurement. Certification of specialization/documentation relating to mine material to be procured, engineering and quality assurance services in support of mine material procurements and publications in support of component assembly and test for service and MET program. (VT010, VT051, VT830, VT860)

B. Procurement of service mine components and sub-assemblies required in support of mine assembly and maintenance to replace items of limited shelf-life such as batteries and pyrotechnics and other perishable or unserviceable items, procurement of components to improve mine operational characteristics and capabilities such as improved flight gear for compatibility with modern high speed aircraft. (VT300)

C. Procurement of mine materials to replace expended components used during the MET program for delivery proficiency. (VT310)

D. Procurement of mine materials to replace expended components used during the MET program for Mine Countermeasures (MCM) proficiency. (VT460)

P-1 SHOPPING LIST

CLASSIFICATION:

CLASSIFICATION:

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**WEAPON SYSTEM COST ANALYSIS EXHIBIT
P-5**

DATE:
FEBRUARY 1997

**APPROPRIATION/BUDGET ACTIVITY
OTHER PROCUREMENT, NAVY/
BA-4: ORDNANCE SUPPORT EQUIPMENT**

P-1 ITEM NOMENCLATURE/SUBHEAD

FLEET MINE SUPPORT (74VT)

COST CODE	ELEMENT OF COST	IDENT CODE	TOTAL COST IN THOUSANDS OF DOLLARS							
			FY 1996		FY 1997		FY 1998		FY 1999	
			QTY	TOTAL COST	QTY	TOTAL COST	QTY	TOTAL COST		
	MINE WARFARE, N852									
VT010	MINE ASSEMBLY & LOADING			1,203		741		45		61
VT051	FLEET MINE SITE MATERIAL			245		342		50		50
VT300	ITEMS LESS THAN \$500K	A		320		162		0		0
VT310	BATTERY REQUIREMENTS	A		63		228		92		93
VT460	VERSATILE EXERCISE MINE SYSTEM VEMS SUPPORT EQUIPMENT/PI	A	18	2,178 802	14	1,638 647	17	2,057 2,073	16	1,984 2,416
VT830	PRODUCTION ENGINEERING			594		441		544		413
VT840	QUALITY ASSURANCE			70		179		50		50
VT860	PROOF & TEST MINE COMP. PROC.			361		688		150		150
VT900	CONSULTING SERVICES			200		230		208		216
TOTAL				6,036		5,296		5,269		5,433

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P-1 SHOPPING LIST

CLASSIFICATION:

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CLASSIFICATION: **UNCLASSIFIED**

BUDGET PROCUREMENT HISTORY AND PLANNING EXHIBIT P-5A										DATE FEBRUARY 1997	
APPROPRIATION/BUDGET ACTIVITY OTHER PROCUREMENT, NAVY/BA-4: ORDNANCE SUPPORT EQUIPMENT					P-1 ITEM NOMENCLATURE FLEET MINE SUPPORT				SUBHEAD 74VT74VT		
COST CODE	LINE ITEM/ FISCAL YEAR	CONTRACTOR AND LOCATION	CONTRACT METHOD & TYPE	CONTRACTED BY	AWARD DATE	DATE OF FIRST DELIVERY	QUANTITY	UNIT COST (000)	SPECS AVAILABLE NOW	SPEC REV REQ'D	IF YES WHEN AVAILABLE
VT460	FY 1996	BAeSEMA UNITED KINGDOM	SS/FFP/OPTION	NAVSEA	03/96	03/97	18	121.0	YES	NO	
VT460	FY 1996	BAeSEMA UNITED KINGDOM	SS/FFP/OPTION	NAVSEA	03/96	03/97	VAR*	VAR*	YES	NO	
VT460	FY 1997	BAeSEMA UNITED KINGDOM	SS/FFP/OPTION	NAVSEA	03/97	01/98	14	117.0	YES	NO	
VT460	FY 1997	BAeSEMA UNITED KINGDOM	SS/FFP/OPTION	NAVSEA	03/97	01/98	VAR*	VAR*	YES	NO	
VT460	FY 1998	BAeSEMA UNITED KINGDOM	SS/FFP/BASIC	NAVSEA	03/98	01/99	17	121.0	YES	NO	
VT460	FY 1998	BAeSEMA UNITED KINGDOM	SS/FFP/BASIC	NAVSEA	03/98	01/99	VAR*	VAR*	YES	NO	
VT460	FY 1999	BAeSEMA UNITED KINGDOM	SS/FFP/OPTION	NAVSEA	03/99	01/00	16	124.0	YES	NO	
VT460	FY 1999	BAeSEMA UNITED KINGDOM	SS/FFP/OPTION	NAVSEA	03/99	01/00	VAR*	VAR*	YES	NO	
REMARKS INCLUDES PRODUCT IMPROVEMENTS (ANECHOIC JACKETS, SONAR INSONIFICATION CAPABILITY, REAL TIME FEEDBACK, ETC), SEVERAL ANCILLARY ITEMS, AND CONTRACTOR ENGINEERING SUPPORT REQUIRED IN ADDITION TO VEM UNIT.											

CLASSIFICATION: **UNCLASSIFIED**

BUDGET PROCUREMENT HISTORY AND PLANNING EXHIBIT P-5A										DATE FEBRUARY 1997	
APPROPRIATION/BUDGET ACTIVITY OTHER PROCUREMENT, NAVY/BA-4: ORDNANCE SUPPORT EQUIPMENT					P-1 ITEM NOMENCLATURE FLEET MINE SUPPORT				SUBHEAD 74VT74VT		
COST CODE	LINE ITEM/ FISCAL YEAR	CONTRACTOR AND LOCATION	CONTRACT METHOD & TYPE	CONTRACTED BY	AWARD DATE	DATE OF FIRST DELIVERY	QUANTITY	UNIT COST (000)	SPECS AVAILABLE NOW	SPEC REV REQ'D	IF YES WHEN AVAILABLE
VT460	FY 2000	BAeSEMA UNITED KINGDOM	SS/FFP/OPTION	NAVSEA	03/00	01/01	20	219.3	YES	NO	
VT460	FY 2001	BAeSEMA UNITED KINGDOM	SS/FFP/OPTION	NAVSEA	03/01	01/02	VARIOUS	VARIOUS	YES	NO	
VT460	FY 2002	BAeSEMA UNITED KINGDOM	SS/FFP/OPTION	NAVSEA	03/02	01/03	VARIOUS	VARIOUS	YES	NO	
VT460	FY 2003	BAeSEMA UNITED KINGDOM	SS/FFP/OPTION	NAVSEA	03/03	01/04	VARIOUS	VARIOUS	YES	NO	
REMARKS											

[illegible]

MANUFACTURER'S NAME AND LOCATION	PRODUCTION SCHEDULE			
	MIN RATE	1-8-5	MAXIMUM	REACHED D+
BRITISH AEROSPACE, UK	2	3	6	

	ADMIN		MANU- FACTURING TIME	TOTAL AFTER 1 OCT
	LEAD TIME			
	PRIOR	AFTER		
	1 OCT	1 OCT		
INITIAL				
REORDER	0	5	10	15
(PREVIOUS SOURCE)	0	5	10	15

REMARKS	*

[illegible][illegible]

INITIAL REORDER (PREVIOUS SOURCE)	ADMIN		MANU- FACTURING TIME	TOTAL AFTER 1 OCT
	LEAD TIME			
	PRIOR	AFTER		
	1 OCT	1 OCT		
	0	5	10	15
0	5	10	15	

VEMS FY00 THROUGH FY03 UNIT PRICE SHOWN IN EXHIBIT P5-A INCLUDES VEMS END ITEMS PLUS
PRODUCT IMPROVEMENTS, SEVERAL ANCILLARY ITEMS, AND CONTRACTOR ENGINEERING
SUPPORT REQUIRED IN ADDITION TO VEM UNIT.

[illegible][illegible]

INITIAL REORDER (PREVIOUS SOURCE)	ADMIN		MANU- FACTURING TIME	TOTAL AFTER 1 OCT
	LEAD TIME			
	PRIOR		AFTER	
	1 OCT		1 OCT	
	0		5	10
0		5	10	15

VEMS FY00 THROUGH FY03 UNIT PRICE SHOWN IN EXHIBIT P5-A INCLUDES VEMS END ITEMS PLUS
PRODUCT IMPROVEMENTS, SEVERAL ANCILLARY ITEMS, AND CONTRACTOR ENGINEERING
SUPPORT REQUIRED IN ADDITION TO VEM UNIT.

CLASSIFICATION: **UNCLASSIFIED**

BUDGET ITEM JUSTIFICATION SHEET							DATE	
P-40							February 1997	
APPROPRIATION/BUDGET ACTIVITY OTHER PROCUREMENT, NAVY BA-4 ORDNANCE SUPPORT EQUIPMENT				P-1 ITEM NOMENCLATURE SURFACE TRAINING DEVICE MODIFICATIONS LI: 5660				
	1996	1997	1998	1999	2000	2001	2002	2003
QUANTITY								
COST (in Millions)	*\$8.6	\$2.4	\$4.8	\$4.5	\$5.4	\$5.0	\$4.6	\$4.5
<p>(L/I 5660)</p> <p>This line provides funds to modify/upgrade training devices to maintain systems at Fleet configuration and to enhance training capability.</p> <p><u>(TS004) SURFACE TRAINING DEVICE MODS</u></p> <p>Provides funding for minor modifications with a unit cost of less than \$1.0M per device. These modifications are improvements/upgrades to in-service surface training systems identified by the program offices and training activities, and are approved by the Resource Sponsor. Modifications are required to meet safety standards, keep training systems compatible with equivalent changes made to fleet operational equipment, and to enhance training capabilities.</p> <p><u>(TS016) DEVICE 20G6, LANDING CRAFT, AIR CUSHION (LCAC) FULL MISSION TRAINER (FMT) UPGRADE</u></p> <p>Provides funding for minor modifications which are improvements/upgrades to in-service surface training systems. These improvements/upgrades are required to keep training systems compatible with equivalent changes made to fleet operational equipment and to enhance trainer capabilities. The unit cost of each minor modification ranges from \$25K to \$1.0M.</p> <p><u>(TS017) SURFACE SHIP ELECTRONIC WARFARE TRAINER (SSEWT)</u></p> <p>The SSEWT is a multi-faceted training device capable of providing familiarization and introduction to the Electronic Warfare environment. This trainer will replace the Surface Warfare portion of Device 10H1 (NEWTS), with a new Cog 2"0" system. This system will provide interactive courseware to as many as 20 students simultaneously or independently at the discretion of the instructor. The SSEWT interactive courseware will provide instruction in the form of lessons or can be used in scenario format. The fundamental purpose of the trainer is to introduce to the "A" school EW rating familiarization with operating environments, both generically and specifically. The system provides basic, intermediate and advanced training capabilities for the apprentice EW operator. The system will consist of state-of-the-art hardware/software so it can adjust to the advancing technology of EW without the necessity of upgrades. The system will augment training on the AN/SLQ-32 as well as the proposed Advanced Integrated Electronic Warfare System (AIEWS).</p> <p><u>*FY 96 FUNDING TRANSITIONED FROM BA-7, TRAINING DEVICE MODIFICATIONS, LI:8089.</u></p>								

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P-1 SHOPPING LIST

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WEAPONS SYSTEM COST ANAL EXHIBIT (P-5)		A. Appropriation/Budget Activity Title/No.		B. Weapon Model Series/ Popular Name		C. Manufacturer Plant City/St. Loc		DATE: February 1997		
		BA-4 ORDNANCE SUPPORT EQUIPMENT		SURFACE TRAINING DEVICE MODIFICATIONS		VARIOUS				
	WEAPONS SYSTEM COST ELEMENTS	IDENT CODE	TOTAL COST IN THOUSANDS OF DOLLARS							
			FY 1996*		FY 1997		FY 1998		FY 1999	
			QTY	TOTAL COST	QTY	TOTAL COST	QTY	TOTAL COST	QTY	TOTAL COST
TS004	<u>SURFACE MODS (N85/N86)</u> SURFACE TRAINING DEVICE MODS Surface Minor Mods (N85) Surface Minor Mods (N86)			2,662 (0) (2,662)		2,448 (0) (2,448)		4,829 (0) (4,829)		4,481 (940) (3,541)
TS016	LCAC FMT UPGRADE, DEVICE 20G6 Device 20G6 (N85) Technical Support (N85) Initial Training (N85)		2	5,463 (4,900) (413) (150)		0		0		0
TS017	SURFACE SHIP ELECT WARFARE TRAINER (N85)			498 (498)		0		0		0
EXPEDITIONARY WARFARE (N85) TOTAL				5,961		0		0		940
SURFACE WARFARE (N86) TOTAL				2,662		2,448		4,829		3,541
TOTALS				8,623		2,448		4,829		4,481
*FY 96 FUNDING TRANSITIONED FROM BA-7. TRAINING DEVICE MODIFICATIONS. LI:8089										

CLASSIFICATION: **UNCLASSIFIED**

BUDGET PROCUREMENT HISTORY AND PLANNING (P5A)										DATE February 1997	
APPROPRIATION/BUDGET ACTIVITY OTHER PROCUREMENT, NAVY BA-4 ORDNANCE SUPPORT EQUIPMENT				P-1 ITEM NOMENCLATURE/SUBHEAD SURFACE TRAINING DEVICE MODIFICATIONS 84TS							
COST CODE	LINE ITEM FISCAL YEAR	CONTRACTOR	CONTRACT METHOD & TYPE	CONTRACTED BY	AWARD DATE	DATE OF FIRST DELIVERY	QTY	UNIT COST	SPECS AVAILABLE NOW	SPEC REV REQ'D	IF YES, WHEN AVAIL.
TS016	LCAC FMT UPGRADE DEVICE 20G6 (FY96)	HUGHES INC.	SS	NAWCTSD	10/96	04/98	2	2,732	YES	YES	02/95
REMARKS, IF ANY, CAN BE FOUND AT THE END OF PROCUREMENT HISTORY AND PLANNING SHEETS											

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CLASSIFICATION:

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SIMULATOR AND TRAINING DEVICE JUSTIFICATION (\$000)						Date February 1997			
Appropriation P-1 Line Item		Weapon System (if applicable)		Equipment Nomenclature		PE			
5660		N/A		Surface Training Device Modification		0804731N			
Fin Plan	Prior Years	*FY96	FY97	FY98	FY99	FY00	FY01	FY02	TOTAL
Quantity		0		VAR	VAR	VAR	VAR	VAR	VAR
Proc		\$8,623	\$2,448	\$4,829	\$4,481	\$5,395	\$4,970	\$4,618	\$35,364
RDT&E									
O&S									
<p><u>(L/I 5660)</u> This line provides funds to modify/upgrade training devices to maintain systems at Fleet configuration and to enhance training capability.</p> <p><u>(TS004) SURFACE TRAINING DEVICE MODS</u> Provides funds for minor modifications with a unit cost of less than \$1.0M per device. These modifications are improvements/upgrades to in-service surface training systems identified by the program offices and training activities, and are approved by the Resource Sponsor. Modifications are required to meet safety standards, keep training systems compatible with equivalent changes made to fleet operational equipment, and to enhance training capabilities.</p> <p><u>(TS017) SURFACE SHIP ELECTRONIC WARFARE TRAINER (SSEWT)</u> The SSEWT is a multi-faceted training device capable of providing familiarization and introduction to the Electronic Warfare environment. This trainer will replace the Surface Warfare portion of Device 10H1 (NEWTS), with a new Cog 2"0" system. This system will provide interactive courseware to as many as 20 students simultaneously or independently at the discretion of the instructor. The SSEWT interactive courseware will provide instruction in the form of lessons or can be used in scenario format. The fundamental purpose of the trainer is to introduce to the A school EW rating familiarization with operating environments, both generically and specifically. The system provides basic, intermediate and advanced training capabilities for the apprentice EW operator. The system will consist of state-of-the-art hardware/software so it can adjust to the advancing technology of EW without the necessity of upgrades. The system will augment training on the AN/SLQ-32 as well as the proposed Advanced Integrated Electronic Warfare System (AIEWS).</p> <p><u>(TS016) DEVICE 20G6, LANDING CRAFT, AIR CUSHION (LCAC) FULL MISSION TRAINER (FMT) UPGRADES</u> The LCAC FMT provides operations training to LCAC operators, engineers, and navigators in both normal and casualty modes. FMT upgrades include visual image generator improvements and block upgrades designed to maintain the Full Mission Trainer in same operation/configuration as fleet operational equipment.</p> <p>*FY 96 FUNDING TRANSITIONED FROM BA-7, TRAINING DEVICE MODIFICATION, LI:8089</p>									
		ITEM	Page No.						
		172	4		EXHIBIT 43A PAGE 1 OF 2				
P-43 Simulator & Training Device Justification									

Classification:

UNCLASSIFIED

Classification: **UNCLASSIFIED**

SIMULATOR AND TRAINING DEVICE JUSTIFICATION (Page 2) (\$000)							Date		February 1997			
Appropriation P-1 Line Item Other Procurement, Navy LI: 5660		Weapon System (if applicable)			IOC Date		Equipment Nomenclature SURF TRAINING DEVICE MODS				PE 0804731N	
Training Device By Type	Site	Deliver y Date	Ready for Date	Average Student Throughpu			FY96*		FY97		FY98	
					QTY	Cost	QTY	Cost	QTY	Cost	QTY	Cost
TS004 SURFACE TRAINING DEVICE MODS												
VAR	VAR	VAR	VAR	N/A			VAR	\$2,662	VAR	\$2,448	VAR	\$4,829
(TS017) SURFACE SHIP ELECTRONIC WARFARE TRAINER (SSEWT)												
OPERATOR	NTTC CORY STA. FL	09/97	12/97				1	\$498				
(TS016) LCAC FMT DEVICE 20G6												
OPERATOR/TEAM	EWTG LITTLE CREEK	02/98	03/98	48			1	\$2,732				
OPERATOR/TEAM	EWTG CORONADO, CA	05/98	06/98	48			1	\$2,732				
*FY 96 FUNDING TRANSITIONED FROM BA-7, TRAINING DEVICE MODIFICATIONS, LI:8089												
			P-1 SHOPPING LIST ITEM NO. 172			PAGE NO. 5		EXHIBIT P-43 page 2 of 2				

Classification: **UNCLASSIFIED**

CLASSIFICATION:

UNCLASSIFIED

BUDGET ITEM JUSTIFICATION SHEET P-40						DATE February 1997			
APPROPRIATION/BUDGET ACTIVITY OTHER PROCUREMENT, NAVY BA-4 ORDNANCE SUPPORT EQUIPMENT					P-1 ITEM NOMENCLATURE SUBMARINE TRAINING DEVICE MODIFICATIONS LI: 5661				
	PRIOR YEARS	FY96 *	FY97	FY98	FY99	FY00	FY01	FY02	FY03
QUANTITY									
COST (In Millions)	N/A	\$13.7	\$19.3	\$23.0	\$23.3	\$27.3	\$30.0	\$19.8	\$20.7
<p>(L/I 5661)</p> <p>This line provides funds to modify/upgrade training devices to keep them compatible with equivalent changes made to Fleet operational equipment and to enhance trainer systems capabilities.</p> <p><u>(TD002) SUBMARINE TRAINING DEVICE MODS</u></p> <p>Provides funding for minor modifications which are improvements/upgrades to in-service submarine training systems which are centrally managed systems. These improvements/upgrades are required to keep training systems compatible with equivalent changes made to fleet operational equipment and to change trainer capabilities to meet emergent training requirements.</p> <p><u>(TD003) SUBMARINE COMBAT SYSTEM TEAM TRAINER (SCSTT) - DEVICE 21A43</u></p> <p>To achieve desired submarine force readiness levels, it is necessary to construct highly sophisticated shorebased training facilities capable of training submarine combat system team personnel in all aspects of submarine approach, attack and surveillance operations in a controlled, simulated environment.</p> <p>The Combat Control System (CCS) MK 1 and CCS MK 2 are installed, or being installed, on SSN 688 and SSBN 726 (TRIDENT) Class submarines. CCS MK 1 and AN/BSY-1 submarines received a block change in FY94 which installed C4.2 Revision 1. This change provides for Tomahawk Block III and partial Harpoon 1C weapons employment. CCS MK 1 submarines will receive Basic kits (initial update of CCS MK1 to CCS MK 2) and CCS MK 2 Block changes.</p> <p>The CCS MK1 tactical program was upgraded in FY93 to include OTH Version 3.2.0, Global Positioning System (GPS) navigation interface, and the implementation of CCS MK1 C4.2 Revision 1. BSY-1 upgrades from the UYK-7 to the UYK-43 computer along with the above MK 1 enhancements via the BSY-1 ECI 010 program. CCS MK 2 ECP 006 will deliver concurrent with the CCS MK 2 DO Block 1 Program and includes Tomahawk Block III, Harpoon Block 1C, ADCAP mods, NTCSA, and ATWCS (Advanced Tomahawk Weapon Control System).</p>									

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P-1 SHOPPING LIST

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* Note: FY96 funds are provided from BA-7 87YZ LI 8089

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BUDGET ITEM JUSTIFICATION SHEET P-40		DATE February 1997
APPROPRIATION/BUDGET ACTIVITY OTHER PROCUREMENT, NAVY BA-4 ORDNANCE SUPPORT EQUIPMENT	P-1 ITEM NOMENCLATURE SUB TRAINING DEVICE MODS LI: 5661	
<p>The CCS MK2 tactical program is to be upgraded to include CCS MK 2 Block 1 C. This includes Combat Display Console (CDC) color/landscape, AN/BYH-1 SUBBRASS replacement, CPU parallel processor removal, AN/UYK-44 removal, Mk 23 Graphic Plotter OER, Combat Team OnBoard Trainer (COBT), additional ADCAP upgrades, and FTAG improvements. CCS MK 2 Block 1 also introduces the Advanced Tomahawk Weapon Control System (ATWCS), NTCS-A and Tomahawk Block Improvement Program (TBIP) which consists of Tomahawk Weapon improvements.</p> <p>The Submarine Multi Mission Team Trainer (SMMTT) Phases 1, 2, 3 program replaces the proprietary mainframe computer system by re-hosting functions on industry standard Local Area Network (LAN) workstations. The mainframes can no longer be upgraded due to service life. The SMMTT modification applies to both the CCS trainers and the acoustic trainers and will occur in three distinct phases. SMMTT Phase 1 provides partial offload of the trainer-unique software and provides additional processing power through the use of independent workstations. SMMTT Phase 2 completes the trainer-unique software offload and enables further enhancements. SMMTT Phase 3 will replace all MIL Standard hardware with commercial emulation hardware, enabling platform independence and wide area network capability. The use of open architecture trainer systems allows for the continuous growth of functional flexibility ultimately leading to employment training conducted for any submarine CCS. Plans are established to likewise upgrade submarine tactical systems to an open architecture, and the trainers will be compatible with the tactical interfaces.</p> <p>FY97 Procures one SMMTT Phase 2 re-host of the SIM/STIM acoustic functions for CCS standalone mode for the CCS Engineering Production Model (EPM).</p> <p>FY98 Procures the trainer unique hardware to upgrade the CC EPM at NUWC, Newport to provide SMMTT Phase 2 functions to support the Trainer EPM with the CCS Mk2 Block 1C upgrade. Procures one SMMTT Phase 1 Trainer upgrade kit to support CCS Mk2 D0 in the 21A43 SCSTT. Offloads selected weapons functions from CCS Mk1 Generalized Simulation Stimulation (GSS) software to SMMTT Phase 2 architecture for the CC EPM.</p> <p>FY99 Offloads non-weapon functions of CCS Mk1 GSS software to SMMTT Phase 2 architecture. Procures two SMMTT Ph1 trainer upgrade kits for the 21A43 SCSTT to support CCS Mk2 Block 1C. Procures one SMMTT Ph2 trainer upgrade kit to support CCS Mk2 D0 Block 1C for the 21A43 SCSTT.</p>		

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P-1 SHOPPING LIST

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CLASSIFICATION: **UNCLASSIFIED**

BUDGET ITEM JUSTIFICATION SHEET		DATE
P-40		February 1997
APPROPRIATION/BUDGET ACTIVITY	P-1 ITEM NOMENCLATURE	
OTHER PROCUREMENT, NAVY		
BA-4 ORDNANCE SUPPORT EQUIPMENT	SUB TRAINING DEVICE MODS LI: 5661	
<p><u>(TD005) SUBMARINE ACOUSTIC TRAINER - DEVICE 21B64</u></p> <p>The AN/BQQ-5B/C/D(V) Series Sonar Systems are installed aboard SSN 594/637/688 Class submarines. The AN/BQQ-5E(V3)/(V4) will be is being installed aboard SSN 688 and SSBN 726 (TRIDENT) Class submarines. The Submarine Acoustic Trainer, Device 21B64, simulates the digital data processing and graphic displays of the associated AN/BQQ-5(V) tactical system. The Tactical Acoustic Rapid COTS (commercial-off-the-shelf) Insertion (ARCI) Phase I upgrades AN/BQQ5E(V) systems to incorporate dual array processing, full spectrum processing and low frequency active rejection capabilities.</p> <p>Device 21B64 supports training for enlisted and officer pipelines. It provides individual operators and combat teams the opportunity to train ashore, prior to, and between deployments. The shore based training provides a means of maintaining team proficiency in stand alone or in combined team mode when tied to Device 21A series Attack Trainers.</p> <p>FY97 upgrades the common Acoustic Trainer EPM with additional ARCI Phase I towed array capability; additional acoustic functions are re-hosted into SMMTT. FY97 will upgrade three trainers to the 21B64E(V) SMMTT Phase I supporting ARCI Phase I.</p> <p>FY98 Procure modifications to offload the remainder of 21B64E(V) ARCI Phase I SIM/STIM software into the SMMTT Ph 2 architecture for the acoustic trainer EPM.</p> <p>FY99 Procures modifications to the Acoustic Trainer EPM for the SMMTT Ph2 operating system software with selected upgrades to support the ARCI Phase III functionality. Procures modifications to the SMMTT Phase 2 software to support Medium Frequency Active Improvements (MFAI) for the Acoustic Trainer EPM.</p> <p><u>(TD006) SSN COMBAT CONTROL OPERATOR TRAINER / COMMON BASIC OPERATOR TRAINER (CBOT)</u></p> <p>The purpose of these devices is to provide pipeline training to submarine force personnel who require basic and advanced operator training and to provide refresher training to Fleet personnel designated to sustain their required level of operator competence. These devices train individual operators on the CCS MK 1/ MK 2, and AN/BSY-1 by supplementing classroom instructions with dynamic training exercises. Through the use of these training devices, the student obtains direct, interactive experience in Command, Weapon, Target Motion Analysis (TMA), and Over-The-Horizon (OTH) operations in order to develop the skills required for effective command and control operations.</p>		

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P-1 SHOPPING LIST

CLASSIFICATION:

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CLASSIFICATION: **UNCLASSIFIED**

BUDGET ITEM JUSTIFICATION SHEET		DATE
P-40		February 1997
APPROPRIATION/BUDGET ACTIVITY	P-1 ITEM NOMENCLATURE	
OTHER PROCUREMENT, NAVY		
BA-4 ORDNANCE SUPPORT EQUIPMENT	SUB TRAINING DEVICE MODS LI: 5661	
<p>These devices provide an environment substantially equivalent to that found onboard ship, thus enabling students to develop and maintain the combat control expertise necessary to support Fleet operations. FY-90 established the requirement to provide advanced operator training for CCS MK 2 to support SSN 688, SSN 751 (AN/BSY-1), and TRIDENT SSBN (OHIO) Class submarines. The upgrades to the 21B63 operator trainer (OT) provides a common operator trainer capable of training all SSNs and SSBNs equipped with the CCS MK 2. To reduce life cycle cost, the 21B63 uses a subset of the 21A43 SCSTT simulation/stimulation hardware suite in its design. The Fire Control Submarine and IUSS Training Requirements Review (SITTR) of 6/92 established the requirements for Common Basic Operator Trainers (CBOT) to support revised A-School training pipelines.</p> <p>FY98 Procures trainer unique software modifications to upgrade the CBOT EPM and the training site CBOT, with the CBOT Mk2 D0 Block 1C configuration.</p> <p>FY99 Procures trainer unique software modifications to upgrade the CBOT EPM and the training site CBOT, with the CCS Mk2 D0 Block 1C link 16 functions configuration.</p> <p><u>(TD011) AN/BSY-1 IMPROVEMENTS</u></p> <p>AN/BSY-1 trainers support shorebased training for crews of SSN 751 Class submarines fitted with the AN/BSY-1 integrated Combat Control / Acoustic (CC/A). CC/A Team Trainers support subteam training in combat control and acoustics as well as full combat system team training. The AN/BSY-1 Team Trainer was baselined on two subsystem trainers: the CC subsystem is similar to a Device 21A43, and the acoustic subsystem is similar to a Device 21B64. The Trainer SMMTT program will occur in two phases for the AN/BSY-1 Team Trainer: Phase 1 will upgrade BSY-1 trainers to the 21B64 SMMTT level, and Phase 2 will replace the obsolete mainframe with a distributive network system.</p> <p>FY97 procures trainer unique hardware to upgrade the common acoustic EPM with the SMMTT Phase 2 configuration . FY97 also re-hosts selected BSY-1 functions into the SMMTT Phase 2 system.</p> <p>FY98 Procures modifications to develop AN/BSY-1 SMMTT Phase 1 with ARCI Phase I functionality. Procures one trainer upgrade kit for SMMTT Phase 1 with AN/BSY-1CC/A at ARCI Phase I and CCS Mk1 C4.2V2 functionality.</p> <p>FY99 Procures modifications to SMMTT Phase 2 with AN/BSY 1 ARCI Phase III functionality. Procures one trainer upgrade kit for SMMTT Phase 1 with AN/BSY-1CC/A at ARCI Phase I and CCS Mk1 C4.2V2 functionality.</p>		

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CLASSIFICATION:

UNCLASSIFIED

BUDGET ITEM JUSTIFICATION SHEET P-40		DATE February 1997
APPROPRIATION/BUDGET ACTIVITY OTHER PROCUREMENT, NAVY BA-4 ORDNANCE SUPPORT EQUIPMENT	P-1 ITEM NOMENCLATURE SUB TRAINING DEVICE MODS LI: 5661	
<p><u>(TD012) SUBMARINE BATTLE FORCE TACTICAL TRAINING (BFTT) DEVICE MODS</u></p> <p>The requirement for the Submarine BFTT was established by the BFTT Operational Requirement Document (ORD) No. 2U648877 of 13 Mar 1992. The Submarine BFTT device consists of a carry-on unit that will provide the CO/OOD with a display depicting the position and modes of each participant and target in the BFTT scenario. This device will interface with and interpret the BFTT scenario and make use of the Tactical Advanced Simulated Warfare Integrated Trainer (TASWIT). The Submarine BFTT program will modify TASWIT software to reflect submarine combat systems displays and the interface with BFTT. It will consist of a computer and interface equipment with software designed to interface with and interpret the BFTT system, and to receive and transmit tactical data using own ship's communications equipment. This device is intended to exercise the communications team and the CO/OOD, but not to provide training for the remaining submarine sensor operators and Combat System Team.</p> <p>FY98 The FY98 buy consists of 12 units and accompanying software.</p> <p>FY99 The FY99 buys consist of one unit.</p> <p><u>(TD6IN) INSTALLATION OF EQUIPMENT</u></p> <p>Funding is for the installation of trainers, installation support for trainers, and installations in other shore facilities.</p>		

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WEAPONS SYSTEM COST ANALYSIS EXHIBIT (P-5)		A. Appropriation/Budget Activity Title/No.		B. Weapon Model Series/ Popular Name		C. Manufacturer Plant City/St. Loc		DATE: February 1997		
		BA-4 ORDNANCE SUPPORT EQUIPMENT		SUBMARINE TRAINING DEVICE MODIFICATIONS		VARIOUS				
	WEAPONS SYSTEM COST ELEMENTS	IDENT CODE	TOTAL COST IN THOUSANDS OF DOLLARS							
			FY 1996 *		FY 1997		FY 1998		FY 1999	
			QTY	TOTAL COST	QTY	TOTAL COST	QTY	TOTAL COST	QTY	TOTAL COST
<u>SUBMARINE WARFARE (N87)</u>										
TD002	SUBMARINE TRAINING DEVICE MODS Submarine Minor Mods	A		1,045 (1,045)		962 (962)		1,109 (1,109)		1,035 (1,035)
TD003	SUB COMB SYS TEAM TRAINER Device 21A43 Modifications Technical Support		1	1,959 (675) (1,284)	1	3,455 (2,262) (1,193)	3	6,491 (4,789) (1,702)	3	6,511 (4,521) (1,990)
TD005	SUBMARINE ACOUSTIC TRAINER Device 21B64 Modifications Specialized Skill Training Technical Support		2	7,030 (4,648) (160) (2,222)	5	9,756 (8,144) (103) (1,509)	1	7,291 (5,076) (103) (2,112)	2	7,973 (5,909) (44) (2,020)
TD006	SSN COMB CONT OPER TRAINER	A	2	1,940		(0)	4	1,331	4	569
TD011	AN/BSY-1 TRAINERS AN/BSY-1 Modifications Technical Support		1	1,464 (1,282) (182)	2	4,456 (4,236) (220)	2	4,347 (4,213) (134)	2	6,259 (6,072) (187)
TD012	SUBMARINE BATTLE FORCE TACT TRNG Carry-On CO/OOD Displays			(0)		(0)	12	1,830 (1,830)	1	104 (104)
	SUBMARINE WARFARE (N87) TOTAL			13,438		18,629		22,399		22,451
TD6IN	INSTALLATION OF EQUIPMENT (NON-FMP)			281		630		626		810
TOTALS				13,719		19,259		23,025		23,261
* Note: FY96 funds are provided from 87YZ LI 8089										

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CLASSIFICATION:

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BUDGET PROCUREMENT HISTORY AND PLANNING (P5A)										DATE February 1997	
APPROPRIATION/BUDGET ACTIVITY OTHER PROCUREMENT, NAVY BA-4 ORDNANCE SUPPORT EQUIPMENT				P-1 ITEM NOMENCLATURE/SUBHEAD SUBMARINE TRAINING DEVICE MODIFICATIONS/84TD							
COST CODE	LINE ITEM FISCAL YEAR	CONTRACTOR	CONTRACT METHOD & TYPE	CONTRACTED BY	AWARD DATE	DATE OF FIRST DELIVERY	QTY	UNIT COST	SPECS AVAILABLE NOW	SPEC REV REQ'D	IF YES, WHEN AVAIL.
TD003	SUB COMB SYS TEAM TRAINER MODIFICATIONS [FY96]* DEVICE 21A43 SCSTT MK2	NCCOSC SAN DIEGO	WX	NAVSEA	05/96	01/98	1	\$675,000	YES	NO	
	[FY97] CCS EPM SMMTT ACOUS SIM/STIM	NUWC NEWPORT, RI	WX	NAVSEA	03/97	01/00	1	\$2,262,000	YES	NO	
	[FY98] 21A43 SCSTT SMMTT Ph1 MK D0	NUWC NEWPORT, RI	WX	NAVSEA	01/98	04/98	1	\$617,000	YES	NO	
	CCS EPM SMMT Phase 2 MK2 B1C	NUWC NEWPORT, RI	WX	NAVSEA	03/98	02/00	1	\$3,392,000	YES	NO	
	CCS EPM SMMTT Phase 2 GSS Weps	NUWC NEWPORT, RI NUWC	WX	NAVSEA	03/98	02/00	1	\$780,000	YES	NO	
	[FY99] CCS EPM SMMTT Ph2 GSS Non-Wep	NUWC NEWPORT, RI	WX	NAVSEA	03/99	01/00	1	\$4,261,000	YES	NO	
	21A43 SCSTT SMMTT Ph1 MK2 B1C	NUWC NEWPORT RI	WX	NAVSEA	03/99	01/00	2	\$130,000	YES	NO	

REMARKS, IF ANY, CAN BE FOUND AT THE END OF PROCUREMENT HISTORY AND PLANNING SHEET

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NOTE: FY96 funds are provided from BA-7 87YZ LI8089

CLASSIFICATION:

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BUDGET PROCUREMENT HISTORY AND PLANNING (P5A)										DATE February 1997	
APPROPRIATION/BUDGET ACTIVITY OTHER PROCUREMENT, NAVY BA-4 ORDNANCE SUPPORT EQUIPMENT				P-1 ITEM NOMENCLATURE/SUBHEAD SUBMARINE TRAINING DEVICE MODIFICATIONS/84TD							
COST CODE	LINE ITEM FISCAL YEAR	CONTRACTOR	CONTRACT METHOD & TYPE	CONTRACTED BY	AWARD DATE	DATE OF FIRST DELIVERY	QTY	UNIT COST	SPECS AVAILABLE NOW	SPEC REV REQ'D	IF YES, WHEN AVAIL.
TD005	<u>SUBMARINE ACOUSTIC TRAINER</u> DEVICE 21B64 MODIFICATIONS [FY96] ACOUSTIC EPM PLOC	LORAL MANASSAS, VA	SS/AF Opt	NAVSEA	05/96	04/98	1	\$2,927,500	YES	NO	
	ACOUSTIC EPM Re-host Main Frame	LORAL MANASSAS, VA	SS/AF Opt	NAVSEA	05/96	04/98	1	\$1,720,500	YES	NO	
	[FY97] DEVICE 21B64 SMMTT 1 ARCI I Kit	LORAL MANASSAS, VA	SS/AF Opt	NAVSEA	03/97	04/98	3	\$725,000	YES	NO	
	ACOUSTIC EPM Rehost Acoustic	LORAL MANASSAS, VA	SS/AF Opt	NAVSEA	03/97	04/00	1	\$2,881,000	YES	NO	
	ACOUSTIC EPM ARCI I Towed Array	LORAL MANASSAS, VA	SS/AF Opt	NAVSEA	03/97	04/00	1	\$3,088,000	YES	NO	
	[FY98] ACOUSTIC EPM SMMTT2 ARCI I SIM	LORAL MANASSAS, VA	SS/AF Opt	NAVSEA	03/98	04/00	1	\$5,076,000	YES	NO	
	[FY99] ACOUSTIC EPM SMMTT2 ARCI III	LORAL MANASSAS, VA	SS/AF Opt	NAVSEA	03/99	01/01	1	\$4,405,000	YES	NO	
	ACOUSTIC EPM SMMTT2 MFAI	LORAL MANASSAS, VA	SS/AF Opt	NAVSEA	03/99	01/01	1	\$1,504,000	YES	NO	

REMARKS, IF ANY, CAN BE FOUND AT THE END OF PROCUREMENT HISTORY AND PLANNING SHEET

CLASSIFICATION:

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CLASSIFICATION: **UNCLASSIFIED**

BUDGET PROCUREMENT HISTORY AND PLANNING (P5A)									DATE February 1997		
APPROPRIATION/BUDGET ACTIVITY OTHER PROCUREMENT, NAVY BA-4 ORDNANCE SUPPORT EQUIPMENT				P-1 ITEM NOMENCLATURE/SUBHEAD SUBMARINE TRAINING DEVICE MODIFICATIONS/84TD							
COST CODE	LINE ITEM FISCAL YEAR	CONTRACTOR	CONTRACT METHOD & TYPE	CONTRACTED BY	AWARD DATE	DATE OF FIRST DELIVERY	QTY	UNIT COST	SPECS AVAILABLE NOW	SPEC REV REQ'D	IF YES, WHEN AVAIL.
TD006	<u>SUB COMB CONT OPER TRAINERS</u> [FY96] CBOT EPM and Site	NUWC NEWPORT, RI	WX	NAVSEA	03/96	06/98	2	\$970,000	YES	NO	
	[FY98] CBOT CCS MK2 D0 B1C EPM and Site	NUWC NEWPORT, RI	WX	NAVSEA	03/98	03/99	4	\$332,750	YES	NO	
	[FY99] CBOT CCS MK2 LINK 16 EPM and Site	NUWC NEWPORT, RI	WX	NAVSEA	03/99	10/00	4	\$142,250	YES	NO	
TD011	<u>DEVICE AN/BSY-1 TRAINER</u> AN/BSY-1 MODIFICATION										
	[FY96] BSY1/Acous EPM 21B SMMTT Ph1	NUWC NEWPORT, RI	SS/AF Opt	NAVSEA	05/96	04/98	1	\$1,282,000	YES	NO	
	[FY97] BSY1/Acous EPM SMMTT Ph2 h/w	LORAL MANASSAS, VA	SS/AF Opt	NAVSEA	03/97	04/98	1	\$504,000	YES	NO	
	BSY1/Acous EPM Re-host BSY1	LORAL MANASSAS, VA	SS/AF Opt	NAVSEA	03/97	04/00	1	\$3,732,000	YES	NO	

REMARKS, IF ANY, CAN BE FOUND AT THE END OF PROCUREMENT HISTORY AND PLANNING SHEET

CLASSIFICATION:

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CLASSIFICATION: **UNCLASSIFIED**

BUDGET PROCUREMENT HISTORY AND PLANNING (P5A)									DATE February 1997		
APPROPRIATION/BUDGET ACTIVITY OTHER PROCUREMENT, NAVY BA-4 ORDNANCE SUPPORT EQUIPMENT				P-1 ITEM NOMENCLATURE/SUBHEAD SUBMARINE TRAINING DEVICE MODIFICATIONS/84TD							
COST CODE	LINE ITEM FISCAL YEAR	CONTRACTOR	CONTRACT METHOD & TYPE	CONTRACTED BY	AWARD DATE	DATE OF FIRST DELIVERY	QTY	UNIT COST	SPECS AVAILABLE NOW	SPEC REV REQ'D	IF YES, WHEN AVAIL.
TD012	[FY98] BSY1/Acoustic EPM SMMTT1 ARCI I	LORAL MANASSAS, VA	SS/AF Opt	NAVSEA	03/98	11/99	1	\$2,776,000	YES	NO	
	BSY-1 TT SMMTT1 ARCI I Kit	LORAL MANASSAS, VA	SS/AF Opt	NAVSEA	03/98	01/00	1	\$1,437,000	YES	NO	
	[FY99] BSY-1 TT SMMTT1 ARCI I KIT	LORAL MANASSAS, VA	SS/AF Opt	NAVSEA	03/99	06/00	1	\$1,473,000	YES	NO	
	BSY1/Acoustic EPM SMMTT2 ARCI III	LORAL MANASSAS, VA	SS/AF Opt	NAVSEA	03/99	08/01	1	\$4,599,000	YES	NO	
	SUBMARINE BATTLE FORCE TAC TRN										
	[FY98] BFTT DEVICE MODS	TBD	C/FFP	NAWCTSD	02/98	02/99	12	\$152,500	NO	NO	
	[FY99] BFTT DEVICE MODS	TBD	C/FFP	NAWCTSD	02/99	02/00	1	\$104,000	NO	NO	

REMARKS, IF ANY, CAN BE FOUND AT THE END OF PROCUREMENT HISTORY AND PLANNING SHEET

CLASSIFICATION:

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BUDGET PROCUREMENT HISTORY AND PLANNING (P5A)		DATE February 1997
APPROPRIATION/BUDGET ACTIVITY OTHER PROCUREMENT, NAVY BA-4 ORDNANCE SUPPORT EQUIPMENT	P-1 ITEM NOMENCLATURE/SUBHEAD SUBMARINE TRAINING DEVICE MODIFICATIONS/84TD	
<p><u>(TD003) SUBMARINE COMBAT SYSTEMS TRAINER (Device 21A43)</u> Original contract awarded to RAYTHEON for CCS MK 2 upgrade in September 1988. ECP 2 awarded 02/91, ECP 3 awarded 03/90, and ECP 6 awarded 04/92. ECP 7 is to be contracted by NUWC Newport.</p> <p><u>(TD005) SUBMARINE ACOUSTIC TRAINER (Device 21B64B/C/D)</u> Device 21B64D contract awarded to IBM in 07/89. Device 21B64E ECP awarded 11/90. FY92 includes the ancilliary equipment for all SSN sites. Device 21B64 ECP 7001 awarded 3/94. Device 21B64E SMMTT awarded 4/95.</p> <p><u>(TD006) SSN COMBAT CONTROL OPERATOR TRAINER, Common Basic Operator Trainer (CBOT)</u> ECP 2 awarded 02/91, ECP 3 awarded 03/90, and ECP 6 awarded 04/92. CBOT awarded 3/96.</p> <p><u>(TD011) AN/BSY-1</u> Original contract awarded to IBM in 02/87. ECP 116/134 awarded 12/91. ECI 003/008 awarded 06/92. ECI 010 awarded 03/93. SMMTT awarded 4/95.</p> <p><u>(TD0012) SUBMARINE BATTLE FORCE TACTICAL TRAINING (BFTT) DEVICE MODS</u> The requirement for the Submarine BFTT was established by the BFTT Operational Requirement Document (ORD) No. 2U648877 of 13 Mar 1992.</p>		

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CLASSIFICATION:

Exhibit P-3a, Individual Modification

Classification: **UNCLASSIFIED**

LI: 5661

Date: **February 1997**

MODELS OF SYSTEMS AFFECTED 21A43 TYPE MODIFICATION: UPGRADE MODIFICATION TITLE: TD003 Combat System Team Trainer

DESCRIPTION/JUSTIFICATION: Modifications include the procurement of modifications to support tactical improvements to all 21A43 Submarine Combat System Team Trainers (SCSTTs) and the Land Based Test Facility (LBTF). Other modifications are made as required by the Submarine Group (STTWG), and Submarine Multi Mission Team Trainer (SMMTT) modifications. All installations are at shore-based sites; funding is budgeted to allow long-lead planning, site surveys, and preparation.

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES:

FINANCIAL PLAN: (TOA, \$ in Millions)

	Prior Yrs		PY-1		PY		CY		BY1		BY2		BY2+1		BY2+2		BY2+3		BY2+4		TC		Total	
			FY95*		FY96*		FY97		FY98		FY99		FY00		FY01		FY02		FY03					
	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$
RDT&E																								
PROC																								
Inst Kit NR																								
A Kit																								
Comp A																								
Comp B																								
Comp C																								
Eqpt NR																								
Eqpt	15	4.0	1	3.5	1	2.0	1	3.5	3	6.5	3	6.5	7	8.1	6	7.5	3	7.0	3	5.2			43	53.7
Eqpt A																								
Eqpt B																								
ECOs																								
Data																								
Training Eq																								
SE																								
Other																								
Other																								
Other																								
ICS																								
Install Cost					15	0.1	0	0.1	2	0.1	1	0.2	6	0.6	2	0.5	7	0.6	4	0.3	6		43	2.6
Total Proc	15	4.0	1	3.5	1	2.1	1	3.5	3	6.6	3	6.8	7	8.7	6	8.0	3	7.6	3	5.5	0	0.0	43	56.3

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Exhibit P-3a, Individual Modification
(Exhibit P-3a, page 1 of 8)

*NOTE: FY96 & Prior funds are provided from 87YZ LI8089

NOTE: The total program quantity reflects inventory objectives for this item.

Classification: **UNCLASSIFIED**

Exhibit P-3a, Individual Modification (Cont'd)

Classification: **UNCLASSIFIED**

LI: 5661

Date: **February 1997**

MODELS OF SYSTEMS AFFECT 21A43 **MODIFICATION TITLE:** TD003 Combat System Team Trainer

INSTALLATION INFORMATION:

METHOD OF IMPLEMENTATION: Navy Field Activity Teams with Prime Contractor Support.

ADMINISTRATIVE LEADTIME: Months

PRODUCTION LEADTIME: Months

CONTRACT DATES: Current Year: 03/97

Budget Year 1: 01/98

Budget Year 2: 03/99

DELIVERY DATE: Current Year: 01/00

Budget Year 1: 04/98

Budget Year 2: 01/00

(\$ in Millions)																								
Cost:	Prior Yrs		PY-1		PY		CY		BY1		BY2		BY2+1		BY2+2		BY2+3		BY2+4		TC		Total	
			FY95*		FY96*		FY97		FY98		FY99		FY00		FY01		FY02		FY03		To Complete			
	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$
(FY96- 1 kits)					15	0.07	AP	0.0	2	0.5													17	0.6
(FY97- 1 kits)							AP	0.0	AP	0.0	AP	0.6	1	0.0									1	0.7
(FY98- 3 kits)									1	0.4	AP	0.1	2	0.0									3	0.5
(FY99- 3 kits)											AP	0.1	3	0.3									3	0.4
(FY00- 7 kits)													AP	0.2	2	0.4	5	0.6					7	1.3
(FY01- 6 kits)															AP	0.0	2	0.0	4	0.3	0	0.0	6	0.3
(FY02- 3 kits)																AP	0.0	AP	0.0	3	0.0	3	0.0	
(FY03- 3 kits)																		AP	0.0	3	0.0	3	0.0	
TOTAL			0	0.0	15	0.1	0	0.1	3	0.9	0	0.8	6	0.6	2	0.5	7	0.6	4	0.3	6	0.0	43	3.9

Installation Schedule

		PY				CY				BY1				BY2				BY2+1				BY2+2				BY2+3				BY2+4				TC Total	
						FY97				FY98				FY99				FY00				FY01				FY02				FY03					
		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4						
In	15								2	1							1	5			2			7				4		6	43				
Out	15								2	1							1	5			2			7				4		6	43				

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Classification: **UNCLASSIFIED**

Exhibit P-3a, Individual Modification

Classification: **UNCLASSIFIED**

LI: 5661

Date

February 1997

MODELS OF SYSTEMS AFFECTE 21B64 TYPE MODIFICATION: UPGRADES MODIFICATION TITLE: TD005 Acoustic System Team Trainer

DESCRIPTION/JUSTIFICATION: These modifications will upgrade trainers to the 21B64B/C/D/E (V)3/(V)4 configurations and Engineering for an Engineering Change Proposal (ECP) Development Model (EDM) to support the 21B64E (V)3. Provisions are also made to the 21B64 trainers to include block changes as a result of tactical AN/BQQ-5E and SMMTT modif All installations are at shore-based sites; funding is budgeted to allow long-lead planning, site surveys, and preparation.

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES:

FINANCIAL PLAN: (TOA, \$ in Millions)

	Prior Yrs		PY-1		PY		CY		BY1		BY2		BY2+1		BY2+2		BY2+3		BY2+4		TC		Total	
			FY95*		FY96*		FY97		FY98		FY99		FY00		FY01		FY02		FY03					
	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$
RDT&E																								
PROC																								
Inst Kit NR																								
A Kit																								
Comp A																								
Comp B																								
Comp C																								
Eqpt NR																								
Eqpt			1	8.2	2	6.7	5	9.8	1	7.3	2	8.0	5	8.5	10	13.1	4	4.4	4	7.1			34	72.9
Eqpt A																								
Eqpt B																								
ECOs																								
Data																								
Training Eq																								
SE																								
Other																								
Other																								
Other																								
ICS																								
Install Cost					0	0.1	1	0.4	4	0.1	1	0.2	4	0.3	2	0.5	11	0.6	5	0.3	6		34	2.5
Total Proc	0	0.0	1	8.2	2	6.8	5	10.1	1	7.4	2	8.2	5	8.7	10	13.6	4	5.0	4	7.4	0	0.0	34	75.4

P-1 Shipping List - Item No. 173

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Exhibit P-3a, Individual Modification
(Exhibit P-3a, page 3 of 8)

NOTE: The total program quantity reflects inventory objectives for this item.

Classification: **UNCLASSIFIED**

Exhibit P-3a, Individual Modification (Cont'd)

Classification: **UNCLASSIFIED**

LI: 5661

Date: February 1997

MODELS OF SYSTEMS AFFECTED **MODIFICATION TITLE:** TD005 Acoustic System Team Trainer

INSTALLATION INFORMATION Navy Field Activity Teams with Prime Contractor Support.

METHOD OF IMPLEMENTATION Navy Field Activity Teams with Prime Contractor Support.

ADMINISTRATIVE LEADTIME: Months

PRODUCTION LEADTIME: Months

CONTRACT DATES Current Year: 03/97

Budget Year 1: 03/98

Budget Year 2: 03/99

DELIVERY DATE: Current Year: 04/98

Budget Year 1: 04/00

Budget Year 2: 01/01

(\$ in Millions)

Cost:	Prior Yrs		PY-1		PY		CY		BY1		BY2		BY2+1		BY2+2		BY2+3		BY2+4		TC		Total	
			FY95		FY96		FY97		FY98		FY99		FY00		FY01		FY02		FY03		To Complete			
	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$
(FY96- 2 kits)					AP	0.1	1	0.2	2	0.0													3	0.3
(FY97- 5 kits)							AP	0.2	2	0.1	1	0.2	2	0.0									5	0.5
(FY98- 1 kits)									AP	0.0	AP	0.0	1	0.0									1	0.0
(FY99- 2 kits)											AP	0.0	AP	0.0	2	0.3							2	0.4
(FY00- 5 kits)													1	0.2	AP	0.1	4	0.3					5	0.6
(FY01- 10 kits)															AP	0.1	7	0.3	3	0.1			10	0.5
(FY02- 4 kits)																	AP	0.0	2	0.2	2		4	0.2
(FY03- 4 kits)																		AP	0.0	4			4	0.0
TOTAL			0	0.0	0	0.1	1	0.4	4	0.1	1	0.2	4	0.3	2	0.5	11	0.6	5	0.3	6	0.0	34	2.5

Installation Schedule

	PY	CY				BY1				BY2				BY2+1				BY2+2				BY2+3 etc				BY2+4				TC Total		
		FY97				FY98				FY99				FY00				FY01				FY02				FY03						
		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4			
In	0	1							4				1				4				2				9	2			5		6	34
Out	0		1						4				1				4				2				9	2			5		6	34

P-1 Shipping List - Item No. 173

Page No. 15

Exhibit P-3a, Individual Modification
(Exhibit P-3a, page 4 of 8)

Classification: **UNCLASSIFIED**

Exhibit P-3a, Individual Modification

Classification: **UNCLASSIFIED**

LI: 5661

Date: February 1997

MODELS OF SYSTEMS AFFECTED CCOT **TYPE MODIFICATION** UPGRADE **MODIFICATION TITLE:** TD006 Combat Control Operator Trainer

DESCRIPTION/JUSTIFICATION: The purpose of these trainers is to provide submarine force operator training in support of FCS MK117 and Mk1. The CBOT will support CCS MK1/Mk2. All installations are at shore-based sites; funding is budgeted to allow long-lead planning, site surveys, and preparation.

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES:

FINANCIAL PLAN: (TOA, \$ in Millions)

	Prior Yrs		PY-1		PY		CY		BY1		BY2		BY2+1		BY2+2		BY2+3		BY2+4		TC		Total	
			FY95*		FY96*		FY97		FY98		FY99		FY00		FY01		FY02		FY03					
	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$
RDT&E																								
PROC																								
Inst Kit NR																								
A Kit																								
Comp A																								
Comp B																								
Comp C																								
Eqpt NR																								
Eqpt	1	0.3	0	0.0	2	1.9	0	0.0	4	1.3	4	0.6	4	0.6	4	0.6	0	0.0	0	0.0			19	5.5
Eqpt A																								
Eqpt B																								
ECOs																								
Data																								
Training Eq																								
SE																								
Other																								
Other																								
Other																								
ICS																								
Install Cost	0	0.0	0	0.0	1	0.1	0	0.2	2	0.0	4	0.1	0	0.1	4	0.0	8	0.0	0	0.0			19	0.4
Total Proc	1	0.3	0	0.0	2	2.0	0	0.2	4	1.4	4	0.7	4	0.7	4	0.6	0	0.0	0	0.0	0	0.0	19	5.9

P-1 Shipping List - Item No. 173

Page No. 16

Exhibit P-3a, Individual Modification
(Exhibit P-3a, page 5 of 8)

NOTE: The total program quantity reflects inventory objectives for this item.

Classification: **UNCLASSIFIED**

Exhibit P-3a, Individual Modification (Cont'd)

Classification: **UNCLASSIFIED**

LI: 5661

Date: February 1997

MODELS OF SYSTEMS AFFECTED: CCOT **MODIFICATION TITLE:** TD006 Combat Control Operator Trainer

INSTALLATION INFORMATION:

METHOD OF IMPLEMENTATION: Navy Field Activity Teams with Prime Contractor Support.

ADMINISTRATIVE LEADTIME: Months

PRODUCTION LEADTIME: Months

CONTRACT DATE: Current Year: N/A

Budget Year 1: 03/98

Budget Year 2: 03/99

DELIVERY DATE: Current Year: N/A

Budget Year 1: 03/99

Budget Year 2: 10/00

(\$ in Millions)

Cost:	Prior Yrs		PY-1		PY		CY		BY1		BY2		BY2+1		BY2+2		BY2+3		BY2+4		TC		Total	
			FY95		FY96		FY97		FY98		FY99		FY00		FY01		FY02		FY03		To Complete			
	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$
(FY96- 2 kits)					1	0.1	AP	0.1	2	0.0													3	0.2
(FY97- 0 kits)																							0	0.0
(FY98- 4 kits)									AP	0.0	4	0.0											4	0.0
(FY99- 4 kits)											AP	0.1	AP	0.0	4	0.0							4	0.1
(FY00- 4 kits)													AP	0.0	AP	0.0	4	0.0					4	0.0
(FY01- 4 kits)															AP	0.0	4	0.0					4	0.0
(FY02- 0 kits)																							0	0.0
(FY03- 0 kits)																							0	0.0
TOTAL			0	0.0	1	0.1	0	0.1	2	0.0	4	0.1	0	0.0	4	0.0	8	0.0	0	0.0	0	0.0	19	0.3

Installation Schedule

	PY	CY				BY1				BY2				BY2+1				BY2+2 BY2+3 etc				BY2+4				TC Total					
		FY97				FY98				FY99				FY00				FY01				FY02				FY03					
		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4		
In	1					2				4								4				8								0	19
Out	1						2				4								4				8							0	19

P-1 Shipping List - Item No. 173

Page No. 17

Exhibit P-3a, Individual Modification
(Exhibit P-3a, page 6 of 8)

Classification: **UNCLASSIFIED**

Exhibit P-3a, Individual Modification

Classification: **UNCLASSIFIED**

LI: 5661

Date: February 1997

MODELS OF SYSTEMS AFFECTED: AN/BSY-1 Team Trainer TYPE MODIFICATION: UPGRADES MODIFICATION TITLE: TD011 AN/BSY-1 CC/A Team 1

DESCRIPTION/JUSTIFICATION The modifications provide upgrades to match the tactical systems for the trainers and Acoustic and Combat Control Engineering Procurement Models (EPM) for the AN/BSY-1 trainers. All installations are at shore-based sites; funding is budgeted to allow long-lead planning, site surveys, and preparation.

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES:

FINANCIAL PLAN: (TOA, \$ in Millions)

	Prior Yrs		FY-1		FY		CY		BY1		BY2		BY2+1		BY2+2		BY2+3		BY2+4		TC		Total	
			FY95*		FY96*		FY97		FY98		FY99		FY00		FY01		FY02		FY03					
	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$
RDT&E																								
PROC																								
Inst Kit NR																								
A Kit																								
Comp A																								
Comp B																								
Comp C																								
Eqpt NR																								
Eqpt	3	5.0	1	2.8	1	1.5	2	4.5	2	4.3	2	6.3	2	6.0	3	6.6	0	0.3	0	0.3			16	37.5
Eqpt A																								
Eqpt B																								
ECOs																								
Data																								
Training Eq																								
SE																								
Other																								
Other																								
Other																								
ICS																								
Install Cost			2	0.2	1	0.0	1	0.0	1	0.4	0	0.4	5	0.2	1	0.1	4	0.0	0	0.0	1		16	1.5
Total Proc	3	5.0	1	2.9	1	1.5	2	4.5	2	4.7	2	6.7	2	6.3	3	6.7	0	0.3	0	0.3	0	0.0	16	39.0

P-1 Shipping List - Item No. 173

Page No. 18

Exhibit P-3a, Individual Modification
(Exhibit P-3a, page 7 of 8)

NOTE: The total program quantity reflects inventory objectives for this item.

Classification: **UNCLASSIFIED**

Exhibit P-3a, Individual Modification (Cont'd)

Classification: **UNCLASSIFIED**

LI: 5661

Date: February 1997

MODELS OF SYSTEMS AFFE AN/BSY-1 TEAM TRAINERS **MODIFICATION TITLE:** TD011 AN/BSY-1 CC/A Team Trainer

INSTALLATION INFORMATION:

METHOD OF IMPLEMENTA Navy Field Activity Teams with Prime Contractor Support.

ADMINISTRATIVE LEADTIME: Months

PRODUCTION LEADTIME: Months

CONTRACT DATES: Current Year: 03/97

Budget Year 1: 03/98

Budget Year 2: 03/99

DELIVERY DATE: Current Year: 04/98

Budget Year 1: 11/99

Budget Year 2: 06/00

(\$ in Millions)

Cost:	Prior Yrs		PY-1		PY		CY		BY1		BY2		BY2+1		BY2+2		BY2+3		BY2+4		TC		Total	
			FY95		FY96		FY97		FY98		FY99		FY00		FY01		FY02		FY03		To Complete			
	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$
(FY96- 1 kits)					3	0.0	1	0.0	1	0.0													5	0.1
(FY97- 2 kits)							AP	0.0	AP	0.0	AP	0.0	2	0.0									2	0.1
(FY98- 2 kits)									AP	0.4	AP	0.2	2	0.1									2	0.6
(FY99- 2 kits)											AP	0.1	1	0.1	1	0.1							2	0.3
(FY00- 2 kits)													AP	0.0	AP	0.0	2	0.0					2	0.0
(FY01- 3 kits)															AP	0.0	2	0.0	AP	0.0	1	0	3	0.1
(FY02- 0 kits)																							0	0.0
(FY03- 0 kits)																							0	0.0
TOTAL			0	0.0	3	0.0	1	0.0	1	0.4	0	0.2	5	0.2	1	0.1	4	0.0	0	0.0	1	0.0	16	1.2

Installation Schedule

	PY	CY				BY1				BY2				BY2+1				BY2+2				BY2+3				BY2+4				TC	Total
		FY97				FY98				FY99				FY00				FY01				FY02				FY03					
		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4		
In	3				1		2							1	3			1				3				2				0	16
Out	3				1		2								1	3		1					3			2				0	16

P-1 Shipping List - Item No. 173

CLASSIFICATION: UNCLASSIFIED

BUDGET ITEM JUSTIFICATION SHEET P-40						DATE: February 1997		
APPROPRIATION/BUDGET ACTIVITY OTHER PROCUREMENT, NAVY BA 4: Ordnance Support Equipment					P-1 ITEM NOMENCLATURE Industrial Depot Maintenance Equipment BLI # 5665			
	1996	1997	1998	1999	2000	2001	2002	2003
QTY.								
COST MILL	6.8*	20.2	0	0	0	0	0	0
<p>ITEM DESCRIPTION/JUSTIFICATION: This line item provides for procurement and installation of equipment for the initial outfitting of military construction projects as NAS North Island. Depot equipment for initial outfitting of Military Construction Projects :</p> <p>MCON P-701 Controlled Industrial Facility, NAS North Island (FR001): These projects are required as depot equipment for Military Construction Project P701, Controlled Industrial Facility, at Naval Air Station North Island. MCON P701, programmed for FY 96 with a Base Operational Date (BOD) of November 1997, will provide depot level repair and maintenance of propulsion plant systems and components of CVNs homeported at NAS North Island. These projects are required to fund the manufacture/procurement of the equipment listed for MCON P-701.</p> <p>MCON P-702 Controlled Industrial Facility, NAS North Island (FR002): These projects are required as depot equipment for Military Construction Project P702, Controlled Industrial Facility, at Naval Air Station North Island. MCON P702, programmed for FY 97 with a BOD of April 1998, will provide depot level repair and maintenance of propulsion plant systems and components of CVNs homeported at NAS North Island. These projects are required to fund the manufacture/procurement of the equipment listed for MCON P-702.</p> <p>**Program transferred from BA-7 OPN BLI # 8134.</p>								

WEAPON SYSTEMS COST ANALYSIS EXHIBIT P-5									DATE: February 1997	
APPROPRIATION/BUDGET ACTIVITY OTHER PROCUREMENT, NAVY BA 4: ORDNANCE SUPPORT EQUIPMENT					P-1 ITEM NOMENCLATURE INDUSTRIAL DEPOT MAINTENANCE EQUIPMENT				SUBHEAD 84FR	
COST CODE	ELEMENT OF COST	IDENT CODE	TOTAL COST IN THOUSANDS OF DOLLARS							
			FY 1996		FY 1997		FY 1998		FY 1999	
			QTY	TOTAL COST	QTY	TOTAL COST	QTY	TOTAL COST	QTY	TOTAL COST
FR001	MCON P-701	A								
	Plant Equipment			1,125						
	Industrial Plant Equipment			1,145						
	Material Handling Equipment			1,435						
	Instrument Equipment			115						
	Work Enclosures			3,023		2,492				
FR002	Crane, Mobile, 150 Ton					1,908				
	MCON P-702									
	Design Engineering Support					988				
	Calibration and Test Equipment					4,517				
	Chemistry Lab Equipment					3,306				
	Component Cleaning Equipment					360				
	Plant Equipment					431				
	NDT Equipment					5,931				
						262				
	TOTAL			6,843		20,195				